

Rock Products

DEVOTED TO THE PRODUCTION
OF ROCK AND ITS PRODUCTS

Vol. V. No. 21.

LOUISVILLE, KY., OCTOBER 5, 1906.

STONE EDITION

VULCAN CHILLED SHOT

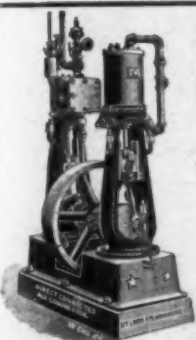
FOR
Rapid Rubbing, Sawing,
and Turning Granite,
Marble, Slate, Onyx,
Hard and Soft Stones

VULCAN CHILLED SHOT

—MANUFACTURED BY—
VULCAN GRIT WORKS - ZANESVILLE, OHIO
C. H. JONES, QUINCY, MASS. New England Agent.

VULCAN CHILLED SHOT

IS
A Superior Article. Let
Us Prove It. Write Us
Now For Samples and
Prices



STAR AIR COMPRESSOR

Manufactured by
St. Louis Steam
Engine Co.
15 S. Commercial St.
ST. LOUIS, MO.

Write for catalogue
especially for the retail
Monument trade.

TRY THIS SPACE

IF

You Want Orders

MICHAEL COHEN, St. James Building, Broadway and 26th St.,
NEW YORK CITY.

For patching all kinds of Limestones,
"DUGAN'S INVISIBLE PATCHER,"

For repairing marble, granite, sandstones, etc.,

"MEYER'S GERMAN CEMENT AND LIQUID."

Directions for using with every can.

Stock constantly on hand. There are no better materials on the market. "Nash's Cubing Book."

Read the other 57 varieties—

If you don't want the news.

ROCK PRODUCTS shoots at you—

Its columns covers the whole field.

Wardwell Electric and Steam Stone Channellers

FOR OVER 40 YEARS "WARDWELL'S"
HAVE STOOD FOR ECONOMICAL QUARRYING

GADDERS, STEAM DRILLS, BLOCK WAGONS, DERRICKS, WIRE ROPE,

QUARRY EQUIPMENT OF ALL KINDS.

STEAM STONE CUTTER COMPANY,

RUTLAND, VERMONT.

BALFOUR PINK GRANITE

A beautiful pink granite of uniform color and texture for
mausoleums and large monuments. Shipments to Westerly and
Quincy testify to its superior qualities. Bases in car lots at
about half what you have been paying elsewhere.

BALFOUR QUARRY COMPANY, Salisbury, N. C.

PULSOMETER STEAM PUMPS

SEE ADV. PAGE 9

This Space—
Costs Money

It will pay dividends on the investment—Try It.

Green River Stone

THE STONE THAT GETS WHITE.

CADEN STONE CO., OFFICE AND YARDS,
411 to 425 E. Ohio St., Evansville, Ind.

Blocks Sawed, Planed and
Cut Stone for Building and
Monumental Purposes.
Send Plans for Estimates in
all kinds of Stone.

IF YOU ARE UNEASY

For Lack of Orders

USE THIS SPACE.

This Space is Waiting for Copy—

Your Advertisement would talk as loud here as a whole page in any other paper.

*# Lincoln
Quality
is HONEST Quality*

The stone saw
for the
profit - want
is the

Let us quote you on
the gang saw you
want--or any machine
for working stone.
Write for Catalog K
---or state your needs.

The Colusa
people, way off
in California,
talk like this:—

"The strength, wear, and
capacity of Lincoln planers are
all we can desire. In fact, we did
not know what solid comfort was
until we got your machines."

Stone-Working Machinery
built for speed *and* precision---
you can buy less for less, but
never so much for *the* money

LINCOLN - MERRIMAN CENTER-CRANK GANG

† Heaviest gang built---20,000
pounds with steel frame, 24,000
with timber frame. † 72-inch
balance wheel weighs 2,000
pounds. † Never knew our

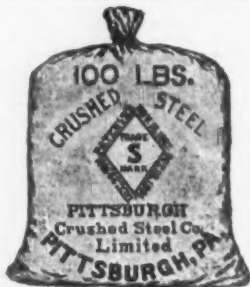
center-draw crankshaft to break.
† Whole saw built for service,
speed, easy running---screwfeed
assures accurate cut and no
racking nor waste power.

LINCOLN IRON WORKS
RUTLAND VERMONT

PITTSBURGH CRUSHED STEEL CO., Ltd.

PITTSBURGH, PA., U. S. A.
Patentees and Sole Manufacturers of

Diamond
Crushed
Steel



Diamond
Steel
Emery

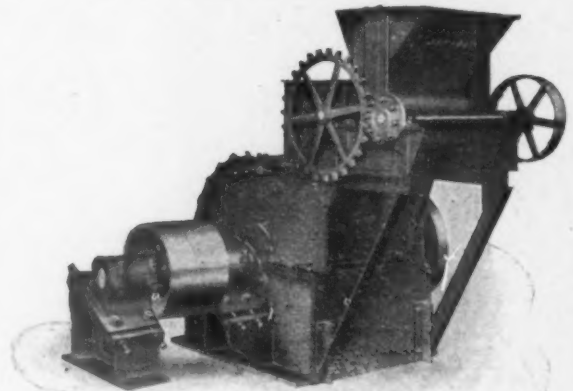
Angular in shape, made from high-grade Crucible Steel. Tough
and lasting. Saws, Rubs, Grinds, Polishes Granite, Stone, Marble,
Brick, etc. Does it cheaper and faster than any other Abrasive.
Write for prices and samples.

Sole Agents for Celebrated "Samson" Chilled Shot.
Samples and prices furnished on application.

AIR Compressors
Stone Tools
of every description.
Catalogue Gratis.
American Air Compressor Works, 26 Cortlandt Street,
NEW YORK CITY.

Jeffrey Crusher

With Automatic Feed Device



A Valuable Addition, Machine Heavily Constructed

BUILT FOR WEAR.

Send for catalogue No. 30 for details.

Elevating, Conveying, Screening, Drilling, Mining,
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COLUMBUS, OHIO, U. S. A.

NEW YORK

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Rock Products

DEVOTED TO THE PRODUCTION
OF ROCK AND ITS PRODUCTS

Vol. V. No. 21.

LOUISVILLE, KY., OCTOBER 5, 1906.

STONE EDITION

Construction

More Knowledge Needed by the Buyer.

Complaints made off hand in reference to the material going into a high class ten-story building recently suggested this point—the trouble came from an inexperienced man buying the materials. He was doing his buying like he would purchase beans and overlooking entirely the merits of the case and the possibilities of getting materials that would make a substantial building and also an attractive one. Before the building was constructed it was rented and the men who were putting up \$1,000,000.00 in the structure were sure of at least 8 per cent as the first year's rental, but when you looked at the building it was on the cheap. Had the materials been selected and good judgment used in purchases the troubles of the contractor and the man who paid the bills would have been fewer. The material would have been on hand when it was contracted for and there would have been no necessity for damage suits for non-fulfillment of contract. The stone would have been seasoned and while a little more money would have been paid for the material, the cost would not have been enough to make any difference to the man who built the building and he would have had a very much more attractive structure, and the future would have demonstrated to him that the difference in cost was nothing compared with the satisfaction of beholding the beautiful structure which he knew would stand up against fire, water or anything else.

Two Buildings.

It has been my lot to pass two buildings in the course of construction every day for weeks, and naturally being interested in material and its use I watched the work. There was no complaint to make on the handling of the material because the contractors who handled these buildings knew how to construct, and hence it became a matter of examination of the material that was going into them.

Building No. 1 was built of oolitic limestone, taken from one of the best quarries in the district and was a high quality of stone, and showed it in every layer of the stone that was put in. It had been cut and manufactured properly and there was no trouble in setting it and each day you could see the beauty of the structure growing on you. When it was completed it was one of the most beautiful structures we have ever seen. It cost about one third as much as the building known as No. 2, and looks very much better, although it is on a smaller plot of ground and has not the same chance to show off the artistic effects of construction.

Building No. 2 looks flat. The material looks and acts like it was gotten out carelessly and without regard to seasoning, and unless the finishers who clean up the stone after the building is

completed, can work miracles it will look like a twenty-five cent job compared with a hundred dollar job, and this again demonstrates that selection of material is the keynote to the construction of a building that will add glory to the architect, contractor and quarryman.

What Material to Use.

The courthouse commission that will look to the erection of a courthouse to cost with furnishings nearly \$1,000,000.00 in and for the county of Shelby and to be located in the city of Memphis, have, within the last few days been over the plans and bids offered. The commission is composed of N. C. Perkins, John T. Walsh, John Colbert, Levi Joy and W. G. Allen. Chairman N. C. Perkins has given out the following statement which will give a good idea as to the present status with reference to materials: "At the meeting of the commission the entire situation was gone over carefully with the architects. The bid of John Pierce & Co. on building of brick and terra cotta was approximately \$725,000.00. The bid of that firm on other materials was approximately as follows: Of Bowling Green stone, \$846,000.00; of Bedford stone, \$856,000.00; of granite, \$1,025,000.00. The commission has on hand to be placed in the building approximately \$725,000.00. The amount makes it possible for us to contract for a building of brick and terra cotta. While the commission realizes that brick and terra cotta are fine building materials, it will be disappointed, and the public will also be disappointed if the structure is erected of anything other than stone of some character. However, the commission has no authority to exceed the money on hand, it has no desire to do so. We have decided to lay the matter before the public through the county court at its meeting the first Monday in October with the recommendation that the court memorialize the legislature to authorize the issue of a sum sufficient for the purpose of making the building either stone or granite. Of course if the county court does not approve of this, there is only one thing left to do and that is to erect the courthouse of brick and terra cotta. For the purpose of hastening this construction as much as possible, and feeling that the public wants action, the commission has authorized the architects to prepare contracts on the basis of brick and terra cotta with a provision in them substituting either of the stones at the prices specified above, and which are the lowest of the bids, time of notice of such change to be given before the foundations are complete. For the purpose of having these contracts properly drawn, Judge Lee Thornton, the county attorney, leaves at once for New York to prepare the legal end of the contracts in connection with the architects, so that we may have the contracts back here in time for the meeting of the county court."

New Building for the Harlem Savings Bank.

Plans were filed last month with the Building Department of New York, for a three-story building to be erected at Nos. 124 to 125 E. 125th St., for the Harlem Savings Bank. It will be of brick with trimmings of granite and marble, having a frontage of 80 feet and a depth of 100 feet. The facade will be decorated with a portico with Ionic columns, and a staircase flanked with polished granite pedestals bearing bronze candelabra. The building is to cost \$150,000.00. The architects are Bannister & Schell.

Stupendous Quantities of Granite Used.

SAN FRANCISCO, CAL.—One of the largest granite quarries in Southern California is located at Casa Blanca in Riverside County. This quarry is located about seventy miles from Los Angeles, and a great deal of the granite is used in that city for structural purposes. Many of the large and handsome buildings in Los Angeles are mainly composed of Casa Blanca granite.

Of course, for all monumental and sculptural work San Diego granite is much superior to that obtained from Casa Blanca. However, among contractors, architects, and builders, the Casa Blanca stone stands very high as a structural material.

Vast quantities of the latter stone have been, and are being used in the building of the colossal breakwater at San Pedro harbor. Work on this gigantic piece of government work has been in progress for the past six years, and the great jetty will not be completed in less than two more years.

From the dimensions of this breakwater, some idea may be formed of the stupendous quantities of stone required. In total length the jetty will be 9,000 feet. At the base—bed of the ocean—the jetty is 180 feet wide; at the apex the superstructure is 38 feet wide. The depth of water ranges from 24 feet at the end near the shore, to 52 feet at the outer end, the average depth being about 40 feet. The entire breakwater is composed of stone.

The contract with the Government specifies that for the superstructure (that part of the jetty below low water line) one-third of the rock must be of a size ranging from 100 to 1,000 pounds weight; one-third must weigh between 1,000 and 4,000 pounds; and the remaining one-third of a weight exceeding 4,000 pounds. In the superstructure (the part above low water which is carefully set in tiers) no stone can be placed on the harbor side of less than 3 tons weight; and on the sea side, no stone weighing less than 8 tons. The contract price was, rock for the substructure, 54½¢ per ton; stone for the superstructure for 72¢ per ton.

San Pedro Harbor is situated 35 miles from Los Angeles, and 100 miles from Casa Blanca quarry. All the material is hauled by rail. At the quarry the rock is loaded in huge pieces on iron platform cars, which are hauled directly out onto the trestle at San Pedro. Cranes, worked by steam, are used in handling the rock, both at the quarry and at San Pedro.

The bottom of the harbor has proved to be quite firm, and as a result, comparatively little loss from settling has occurred.

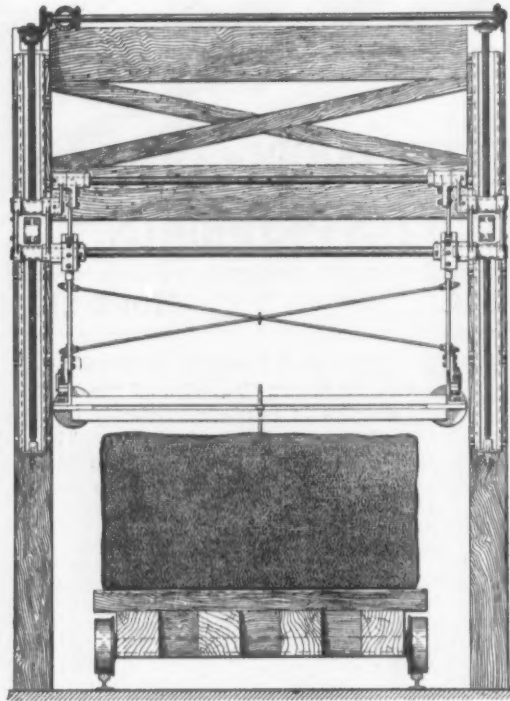
The Government engineers decided that the breakwater should not be connected with the shore, but that a space 1,900 ft. wide should be left between the mainland and the inner end of the jetty. This space will allow a free circulation of tidal currents close in shore and thus prevent sand from shoaling.

So massively are the stone walls constructed that a front will be presented to the force and fury of the ocean, in its stormiest mood, that will be absolutely impregnable. The waves may pound ineffectively for ages against this mighty bulwark of granite.

Nearly eight years will be required to complete this gigantic breakwater. When completed it will have cost Uncle Sam more than \$3,000,000.00, and engineers estimate will have required 2,300,000 tons of stone in the construction.

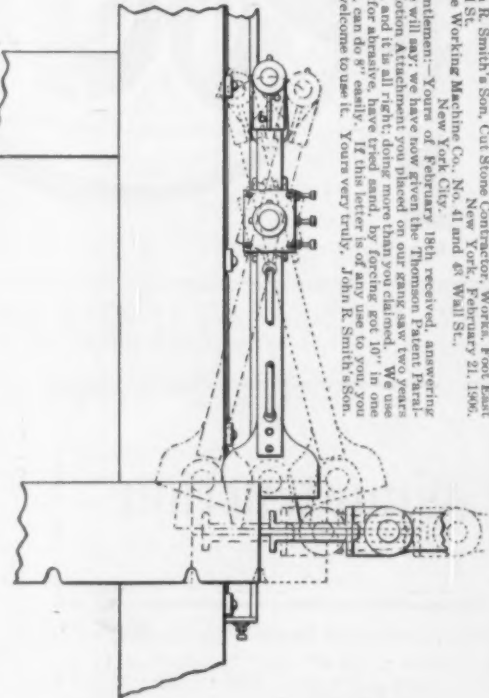
(Construction Continued on Page 18.)

The Thomson Patent Parallel-Motion GANG and RIPS AW



These saws can be seen
in operation at any of
the following stone
yards:

CARR & BALL, Harrison, N. J.
J. J. SPURR & SON, Harrison, N. J.
DURRIE & DAVIDSON,
Harrison, N. J.
A. J. HOERNER & SONS,
Newark, N. J.
B. A. & G. N. WILLIAMS,
Washington, D. C.
BARR, THAW & FRASER,
Hoboken, N. J.
DAVID G. MORRISON,
L. I. City, N. Y.
JOHN R. SMITH'S SONS,
Ft. E, 103 7th St., New York City.
JAMES MUIR, Springfield, Mass.
KIRKPATRICK BROS.,
Philadelphia, Pa.
BUCK & GALLAGHER,
Philadelphia, Pa.
SOUTH SIDE STONE CO.,
Bloomington, Ind.
CONN. STEAM BROWNSTONE
CO.,
Portland, Conn.
EVERGREEN STEAM STONE
WORKS,
Evergreen, N. Y.
J. H. HUTCHINSON,
St. Henri, Canada
SEATTLE CUT STONE CON-
TRACTING CO., Seattle, Wash.



John R. Smith's Son, Cut Stone Contractor, Works, Foot East
100 New York, February 21, 1906.
Stone Working Machine Co., No. 41 and 43 Wall St.,
New York City.
Gentlemen:—Yours of February 18th received, answering
same will say: we have now given the Thomson Patent Par-
allel Motion Attachment you placed on our gang saw two years
trial, and it is all right, doing more than you claimed. We use
short for abrasive, have it all right, by doing more than you
hour, and do not mind, by doing more than you, you
are welcome to use it. Yours very truly, John R. Smith's Son.

The Stone Working Machine Co.,
41 and 43 Wall Street,
New York City.

Gentlemen:—In reply to yours of
recent date, would say; that we
had such confidence in the Thom-
son attachment for stone saws that
we put in the first two manufac-
tured. We have had them in op-
eration now nearly five years, and are
pleased to say our judgment has
been more than justified. We are
confident there is nothing in the
market equal to them. The cost for
repairs has been practically noth-
ing, and they continue to give every
satisfaction. You may use this
letter if it will help you in your
sales. Yours very truly,
CARR & BALL,
111-121 Nassau Ave.
Harrison, N. J., Feb. 20, 1906.

WORKS:

Ave. A and 68th St., N. Y. City.
Mill and Orchard Sts.,
Astoria, L. I.

South Capitol and I Sts.,
Washington, D. C.
Ball Ground, Georgia.

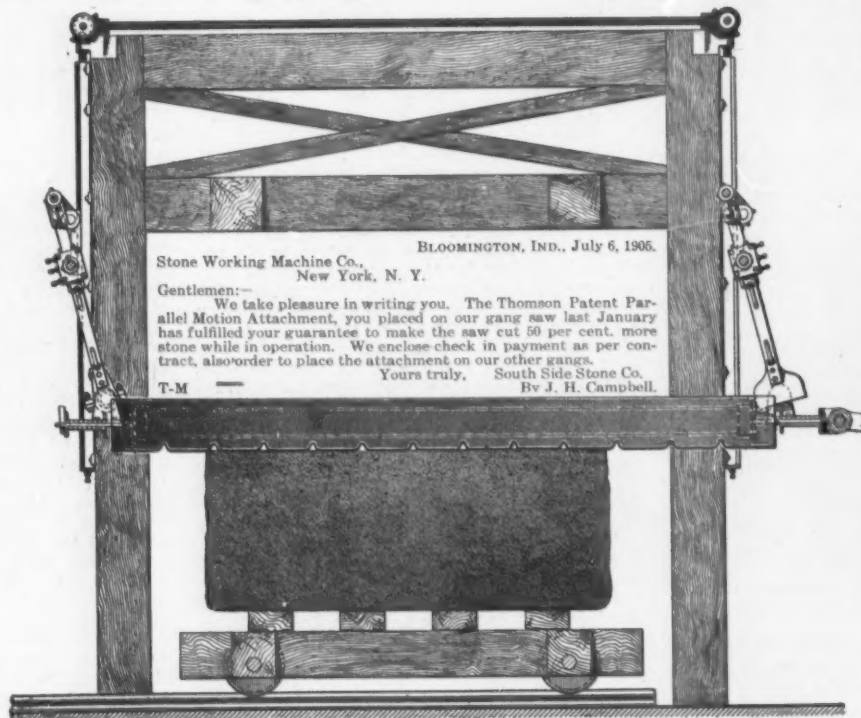
New York, April 19, 1906.
Mr. W. F. RANNEY,
General Manager, Stone Working
Machine Co.
New York City.

Dear Sir:—In reply to the letter
of inquiry you sent us with refer-
ence to the gang of saws furnished
us at our yard at South Capitol and
I Streets, Washington, D. C. will
say, this gang is working very sat-
isfactorily and is cutting about 60
per cent more than our other gangs
under similar conditions in South
Dover Marble. Up to the present
time we have had very few repairs
and we think very well of your Ma-
chine. Yours very truly,
B. A. & G. N. WILLIAMS,
5 and 7 E. 42nd St., N. Y.
B. A. Williams, Pres.

Kirkpatrick Bros.
23d St. and Washington Ave.
Philadelphia, February 2, 1906.
Stone Working Machine Co.,
41 and 43 Wall Street,
New York City.

Gentlemen:—Yours of 1st inst.
received. In answer would state
that we have had a complete new
saw of yours in use for two years.
It has been working very satisfac-
torily. We can saw more than twice
what we could with the former
gang saws, and require but little
more power. Yours truly,
KIRKPATRICK BROS.

Stone Working Machine Company



Stone Working Machine Co.,
BLOOMINGTON, IND., July 6, 1906.
New York, N. Y.

Gentlemen:—
We take pleasure in writing you. The Thomson Patent Par-
allel Motion Attachment, you placed on our gang saw last January
has fulfilled your guarantee to make the saw cut 50 per cent. more
stone while in operation. We enclose check in payment as per con-
tract, also order to place the attachment on our other gangs.
Yours truly, South Side Stone Co.,
T-M ————— By J. H. Campbell.

SOLE OWNER OF ALL PATENTS AND MANUFACTURING RIGHTS

W. F. RANNEY, Manager,

43 WALL ST., AND 43 EXCHANGE PL.,

New York City.

J. J. SPURR & SONS,
Harrison, N. J., February 20, 1906.
Stone Working Machine Co.,
41 and 43 Wall Street,
New York City.

Gentlemen:—Replying to yours
of February 15th, regarding Thom-
son Patent Parallel Motion Attach-
ment will say; we have been using
the two placed on our saws for the
past three years, and during that
time they have received hard usage.
Have had to make some repairs
this winter, but we are perfectly
satisfied and highly recommend
them. Yours truly,
JOSEPH J. SPURR & SONS

JAMES MUIR,
Steam Stone Works,
Bay Street Avenue,
Springfield, Mass.
Springfield, Mass., Mar. 28, 1906.
Stone Working Machine Co.,
41 and 43 Wall Street,
New York City.

Gentlemen:—Replying to yours
of recent date, I am pleased to write
the Thomson Patent Parallel Mo-
tion Stone saws you installed for
me in August 1904, has proven it-
self satisfactory in every way.
Sawing more than double we ever
sawed in every kind of stone, and
I do not see that it requires any
more power.

You ask particularly for report
as to granite. I am doing a granite
job now. Have visited a number
of plants where granite is being
sawed and I must say I am seeing
more and doing better work than
any mill that is sawing granite that
I know of.

You are at liberty to bring or
send any one to see this saw when
I believe all the above statements
will be proven to their entire sat-
isfaction. Yours truly,
JAMES MUIR.

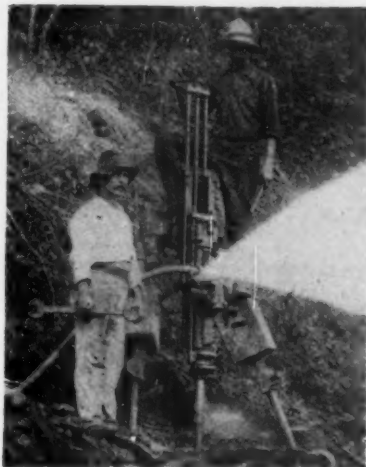
BUCK & GALLAGHER,
Cut Stone Contractor,
N. W. Cor. 9th and Wolf Streets,
Philadelphia, Pa. Feb. 24, 1906.
Mr. W. F. RANNEY, Pres't.
Stone Working Machine Co.,
Nos. 41 and 43 Wall Street,
New York City.

Dear Sir:—Replying to yours ask-
ing if we can recommend the Thom-
son Attachment for stone gang
saws, will say; ours is giving entire
satisfaction; running smoothly and
doing excellent sawing—we believe
doubly what old saw did. Can't
see but what our engine runs it as
well as it did before change. We
are sawing in limestone with four
or five blades for 1ft. 8in. to 2ft. 8
in. per hour, (using shot or crushed
steel of course.) Will show saw to
any one who wishes to examine it.
Yours truly,
BUCK & GALLAGHER.

Tell 'em you saw it in ROCK PRODUCTS.

ROCK DRILLS STANDARD OF THE WORLD

Used in every Country on the Globe where rock is excavated. Over 80,000 Built and Sold.



Ingersoll-Rand Drill at work on the Panama Canal. One of the hundred Ingersoll-Rand Drills of latest design used in the Canal.

THE "LITTLE GIANT"—Acknowledged supreme as a tappet type, with a valve positively moved by mechanical contact with the piston. Unequalled as a steam drill, discharging condensed water without obstruction. Light but powerful, and the essence of simplicity.

THE "SERGEANT"—An "independent valve" type with a direct, positive valve action of uniformly high efficiency under all conditions. A good "mudder" and an unequalled driller. The best "all-around" drill when compressed air or dry steam is used.



Ingersoll-Rand Drills in the Construction of the Chinese Eastern R. R.

AIR COMPRESSORS, TRACK CHANNELERS, STONE TOOLS

INGERSOLL-RAND CO.

Chicago, Ill.
Cleveland, O.

Pittsburg, Pa.
Philadelphia, Pa.

11 Broadway,
NEW YORK.

St. Louis, Mo.
Houghton, Mich.

El Paso, Tex.
Boston, Mass.

P. 18

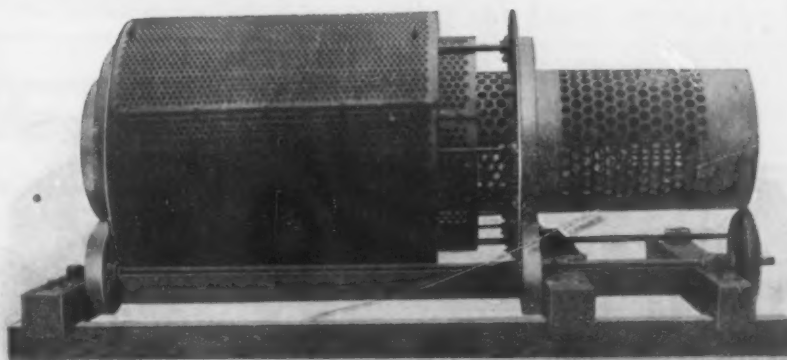
The O'Laughlin Revolving Screen

For Granite, Stone, Sand, Gravel, Coal, Coke or anything requiring separation.

THE principle of separating is exactly opposite that of the older style revolving screen, the materials being discharged on coarse perforations first. The coarse material is immediately separated from the finer in each of the concentric screens to the different required sizes.

The type of screen here illustrated is in use at a No. 8 Crushing plant for limestone (which was formerly equipped with three of the older style screens and required an outlay of \$350.00 for each 100,000 cu. yds. of stone separated. Up to the present time it has made perfect separation into five sizes of 300,000 cu. yds. with a recent outlay of \$27.00 for renewing the portion of the screen that the stone has been discharged on, and should do as much more without any additional outlay.

The inside or longest screen is 8 feet long and 36 inches in diameter, the next concentric screen is 7 feet 6 inches long and 48 inches in diameter, the next screen is 7 feet long and 58 inches in diameter, the next is 6 feet 6 inches long and 66 inches in diameter. With the exception of the inner screen each section is adjustable and the screen is complete without it. The figures given above give 492 sq. ft. of



screen surface which is equal to 3 screens of the old pattern, 14 feet long and 36 inches in diameter.

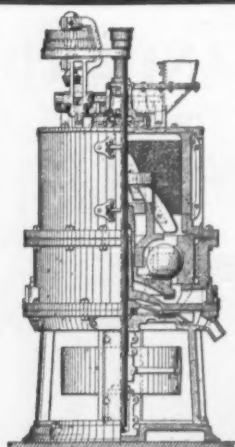
We claim it requires but one-fifth the power to operate our screen than the old style and yet it does the same amount of work. This is proven first, by the length of screen; second, by the size of driving pinion in comparison with gear; third, by the size of trunnions in comparison to the tread of screen. The material to be sep-

arated and weight of screen rests above the bearing points. While in the old style screen it is below the center of bearing points. The material being immediately separated by dropping into each of the concentric screens reducing the wear on screens to the minimum.

Let us know your requirements, what materials you wish separated, the amount daily and the different sizes, and we will furnish an estimate as to cost, power required, etc.

JOHN O'LAUGHLIN, - - - RACINE, WIS.

Tell 'em you saw it in ROCK PRODUCTS.



Fuller-Lehigh Pulverizer Mill

The Best Pulverizing Mill Manufactured

Exhaustive tests in all departments, in competition with the most approved grinding machines in use, have demonstrated the superiority of our machine

OUR CLAIMS:

Greater Output

Better Fineness

Fewer Repairs

Dustless

Few extracts from letters received from users;

"I think you have an ideal mill and one which I believe will be recognized as the most economical and satisfactory machine on the market."

"We feel that after these mills are all installed, our Raw grinding end will be in excellent shape."

"This is certainly a very cheap grinding and I congratulate you on your being able to produce a mill that is equal to these figures."

If interested, write us for further information

LEHIGH CAR, WHEEL & AXLE WORKS, CATASAVQUA, PA. U. S. A.



"MONARCH WIRE ROPE"

The Most Desirable Rope made for
Quarry and Contract Work. & &

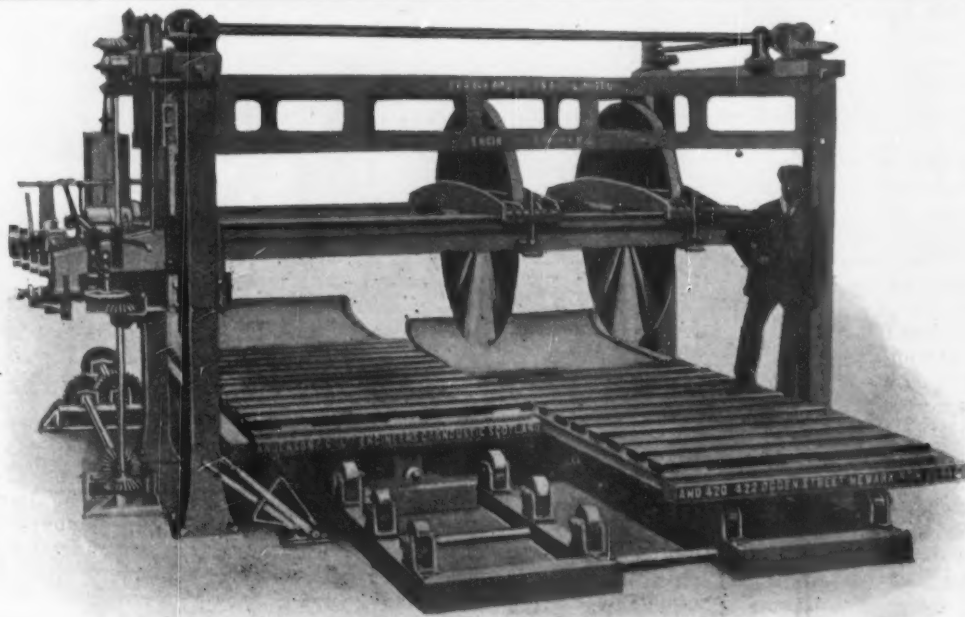
It is not the color of the Strand that makes Monarch Rope so superior, but the material it is made out of. The Whyte strand merely ensures your getting the right rope.

MACOMBER & WHYTE ROPE CO.,

19 and 21 S. Canal St., CHICAGO. 259 Atlantic Ave., BOSTON, MASS. 126 Center St., NEW YORK

George Anderson & Co., (1905) Ltd.

Engineers and Ironfounders, NEWARK, N. J.



Rising and Falling
Diamond Saw,
having Two Saws
and Two Tables,
100 inches
Diameter.

The above is an illustration of our latest pattern Diamond Saw designed to meet the requirements of Stone Workers having a lot of checking to do. It also enables blocks of double the height to be dealt with. The whole of the movements are automatic, thus no time is lost in adjusting the blades. This is the largest Diamond Saw in the world.

Tell 'em you saw it in ROCK PRODUCTS.

NILES CRANES



One of the two 20-ton Niles Cranes, 75 ft. space, installed in yards of Milford Stone Co., Milford, Mass.

— Built by —

NILES-BEMENT-POND CO.

111 Broadway, NEW YORK.

Philadelphia, Boston, Chicago, Pittsburg, St. Louis, London.



CRANES ELECTRIC AND HAND POWER HOISTS

All Types and Sizes of Electric and Hand Power Cranes and Hoists



For stone yards or stone mills, out door or inside service.

AC OR DC MOTORS

THE CASE MFG. CO., Columbus, Ohio.

NEW YORK: McALVE, RIMMER & CO.
85 Liberty St.

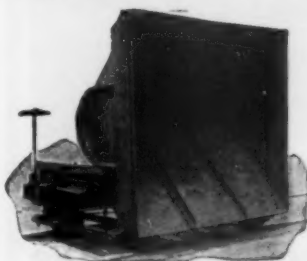
PITTSBURG: A. W. WYCKOFF CO.
Farmers Bank Bldg.

CLEVELAND: C. E. STAMP & CO.
New England Bldg.

CHICAGO: F. S. HICKOK,
Marquette Bldg.

SAN FRANCISCO: LILLEY & THURSTON,
702 Atlas Building.

INDUSTRIAL CARS AND TRACK



No. 100 Body Dump Car.

For Quarries, Mines,
Cement Plants, Etc.

Switches, Turntables, Light
Steel Rails.

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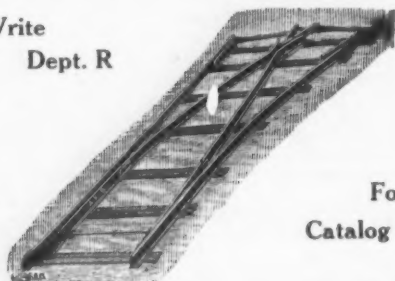
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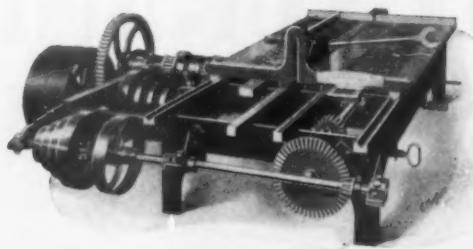
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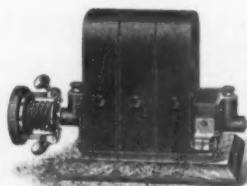
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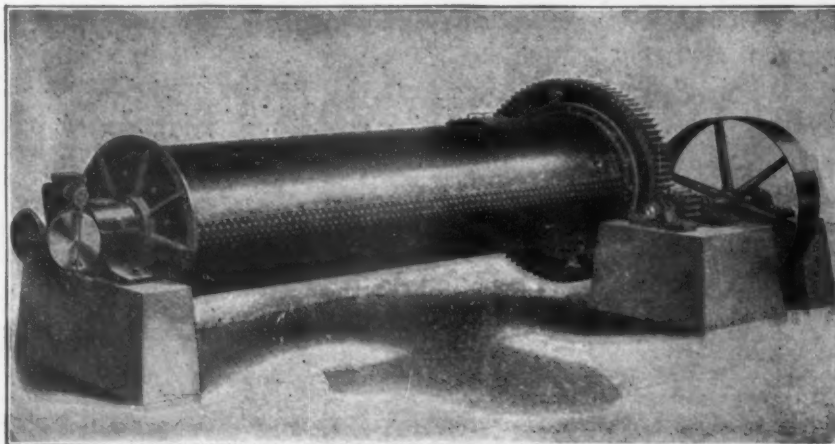
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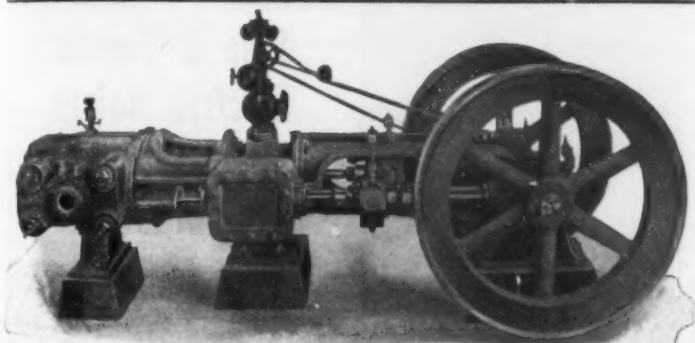
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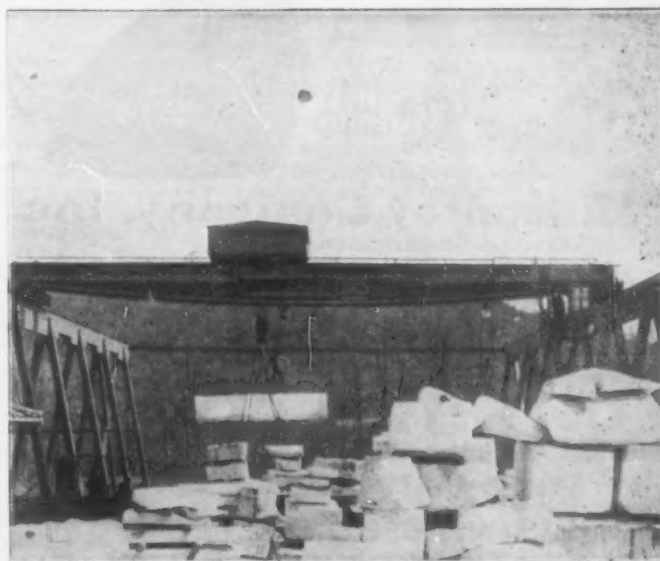
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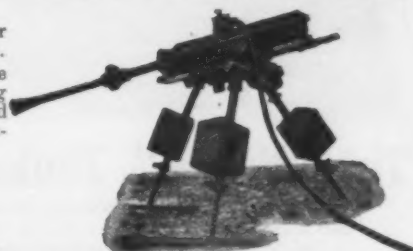
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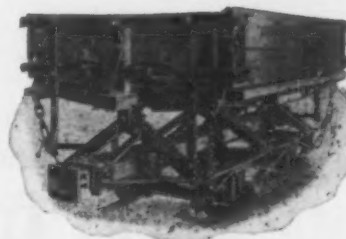
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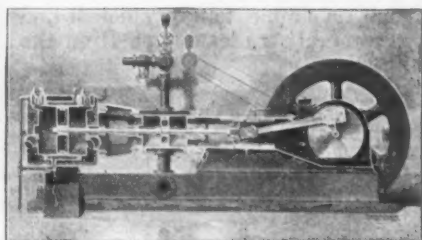
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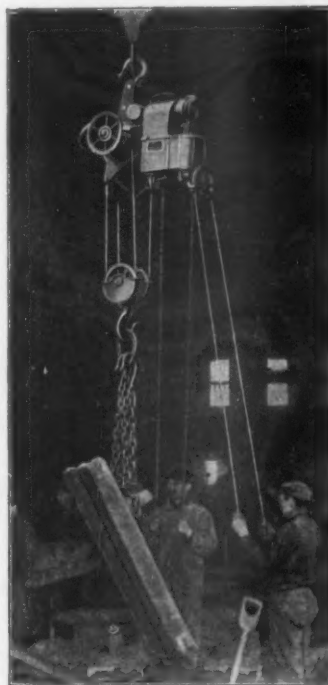
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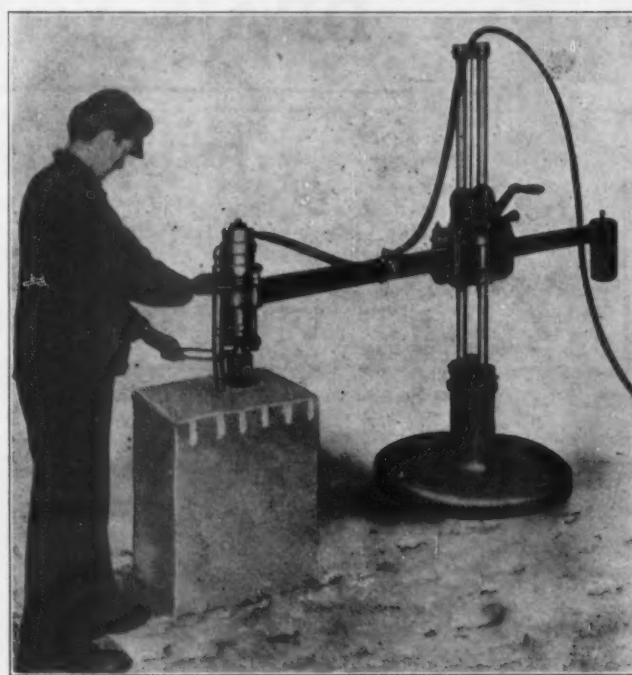
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E. H. DEFEBEAUGH..... President.

A semi-monthly trade journal devoted to the interests of the manufacturers and dealers in rock products and kindred lines, including Lime, Cement, Salt, Sand, Slate, Granite, Marble, Sandstone, Grindstones, Artificial Stone, Emery Stone, Quarries, Monuments, Manganese, Asphalt, Phosphates, Plaster, Terra Cotta, Roofing and Roofing Tile, Coal, Oil, Mineral Wool, Brick, etc.

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Regular Staff Correspondents in the Principal Centers.

The mission of ROCK PRODUCTS is to serve the trade in any and every honorable way possible, to promote better profits and make life more pleasant for those engaged in the business to which it caters. With this end in view, criticism is courted, and all are invited to use its columns to further ideas and suggestions for the good of the trade. The office, too, is at the service of the constituents of this paper: so when you want to buy or sell, or merely ask a question, write, and when you are in town, call and make it your headquarters.

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LOUISVILLE, KY., OCT. 5, 1906.

Don't be sleepy when opportunity comes along your way.

A good code book should be a part of the stone trade's library.

EDUCATE your sales department to the possibilities of your business.

If your power plant is not large enough, the whole plant will drag.

LOOSE Leaf Ledgers mean no more loose methods in handling your business.

ROCK PRODUCTS is the market place for all building materials. Are you with us?

DUPLICATE parts for any machine, if kept on hand, will pay interest on the investment.

You have the quality in your stone. Why not add to its value by insisting on artistic work.

THE cut stone man of the future in the medium sized cities will handle builders' supplies as well.

If you are not making money send for a specialist doctor. He may be able to tell you where your leaks are.

If you haven't enough free air to run your drill, look to your compressor and back to your hose outlet.

It will soon be time to spend some of this year's profits in stripping next year's openings in the quarry.

SCIENCE aids business as improved machinery relieves the thumbscrew placed over you by labor's trust.

If you want men that are not machines try and teach them that success don't come without constant effort.

WHEN you encounter live wires in competition you had better watch your costs in the production of your goods.

THE manufacture of stone who would build the artistic building and get the highest price can not expect to do all the work himself.

A CORRECT trial balance will convince you that the building material that is well advertised is the one that shows increased sales.

SELECT your material, then find an architect who can best plan a house that will be artistic, well arranged, and that will be a house.

DECORATIVE art adds to the possibilities of the stone industry and should be encouraged on our part, both to the consumer and the artist.

THE country dealer should handle all kinds of building and monumental material. The possibilities of his business would then be greater.

If you find you are an expert in getting results from your quarry and selling is distasteful or unprofitable, have some one to do the selling.

WITH an increased production of Barytes, still imports are larger than preceding years. This means more consumption. Are you getting a full production?

THE increased sales of oolitic limestone for building purposes have given encouragement to several new quarries and cutting sheds in the Indiana district.

If your working force is not geared up to the proper point, analyze it. Look inside, then outside; the rotten apple will be found shortly if you but investigate.

THE National Association of Retail Monument dealers is a reality. Every man in the craft should take advantage of its fold to work out the problems of the business.

If cars are scarce, don't be surprised. Our railroad friends have not been able or willing to buy rolling stock to take care of the largely increased tonnage of the past ten years.

If your investments would pay the greatest interest you should put your money and time in plans that will take a prize for showing off the beauty and efficiency of your material.

The operator in stone, whether it be quarryman, contractor or builder, that does not carry insurance on his regular men is overlooking an opportunity to protect himself against a lawsuit.

WE must all keep a lookout for a use for quarry waste, by-products may be responsible for your becoming wealthy. If you are smarter than the rest of us, don't hide your light under a bushel.

THE simple life is all right, but it does not give you the same incentive to get more for the product of your quarry. Let us try a little "high life" and see if 1907 profits will not be larger than this year.

If you have contracts that will keep your men at work through the winter, see that you have a heating plant and you will get more out of your men. Stone cutting is a cold job when it is below zero.

THERE is no reason in the world why the exports of granite and marble should not grow. The material of variety, beauty and accessibility is within easy reach of our seaboard on the Atlantic, the Pacific or the Gulf.

SINCE the stone fence in concrete and other lines is beginning to be fashionable, why wouldn't it be a good point for the quarryman to find some method to handle his waste and make old fashioned rustic stone fences out of it?

It is expected that the next mail order concern will be known as the "Dissemination of Information on How to Crush Stone." We already have such a school devoted to stone cutting and we are for it if carried on intelligent lines.

THE stone masons of the B. C. period must have been geniuses, for they have shown us handiwork of no mean order. We need more effort towards improvement of the art. We already have the precedents and the demand should be our incentive.

WHEN you can buy monuments at the grocery store, it's hard sledding for the monument dealer. Why then do you encourage those in your craft who make it their business to look up department store customers in order to get rid of waste material.

If your equipment is not placed properly in order to reduce your cost of producing to its minimum, you had better get a doctor who can help you out on your betterments, for he will save you his expenses several times over and make it possible for a larger profit.

THESE cool days remind us that soon the quarry will go out of commission or else have some frozen stone on their hands, and the experience of some of the stone men last spring should be lesson enough to have them get their stocks well seasoned before frost comes.

WANTED—More experts in the stone business; experienced men preferred. Too much technicality is as bad as lack of experience. If you want to make more money get the experience and apply it to the best interests of your boss and you will soon be happy. ADDRESS, X Y Z, care Rock Products.

THE Government figures indicate that in 1905 more than \$5,000,000.00 worth of stone was consumed than during the preceding year. With these figures as a basis, it's easy to see that the increase over 1905 during 1906 will be large, indicating the stone age is on us, notwithstanding the growth of artificial stone.

THERE has been a lack of the initiative in some branches of the stone business, probably due to a lack of fuller appreciation of the incentive, but with greater possibilities looming up in this Stone Age, we should not lack invention or desire to succeed, and the building material will belong to the active members of the craft.

THE decrease of building permits for the month of August indicated that the Easterner was enjoying his vacation, but also that he was hard up, but if you had looked over the Metropolis during that same month the large numbers of buildings in course of construction would have convinced you that it was time to draw in the horns on building in New York City.

ONE hundred thousand people make up the stone industry in all branches. If we could all work together there would be a Stone Age fever pervading all of us, from quarryman to architect, that could keep the wheels of fortune turning full time, for the prosperity of our industry. If you want to get inside the rim, "Rock Products" is the hub and will make you comfortable if you are used to going some.

EVERY branch of the stone industry has a good, strong organization in building stone and crushed stone except the quarryman. An effort has been made for several years to get enough of each of the various branches together to make themselves felt as an organization. They have not been successful so far in that connection, although several profitable meetings have been held of wide-awake men in the business, and there is but one good quarry association in existence at this time. However, it will never be able to carry out the purposes of spreading the gospel of intelligent methods and co-operation, unless the building stone quarrymen will send a delegation from their local bodies or make up a crowd in their own town where quarrying is carried on, and make up their minds to attend the next meeting called to work out an organization of this kind, and another one for the crushed stone men. An expression from you on this point, whether you will co-operate in one or the other, or both, would assist in carrying out a plan that will prove beneficial to you.

THE American Institute of Architects are teaching the contractor and the quarryman some new points in working out the problem of the use of a greater number of ornaments and spending more money on building. The large number of moneyed men who are now putting their investment in buildings or putting up a palace as a monument to themselves, means more money spent for construction in the future, and the stone trade should get all of it they can. The architect, of course, influences largely these increased costs, but if the cut stone man and quarryman will work together to produce more of the artistic, suggesting even to the architect by samples of what they are able to get out, it will make it possible for greater demand along these lines. An exhibit at the various builders exchanges or headquarters of architects' societies or some suggestions on the best ornamentation in your class of stone, or the possibilities of your work in stone for interior or exterior work, would be a good idea, and then get the promotion end of your business, with the assistance of Rock Products, working to this end, and while the building costs for construction next year will be greater, the stone man will be getting more money out of it, and that is what we all need.

A New Modern Ten-Story Lighthouse.

The new Diamond Shoals lighthouse will not only safeguard a dangerous coast, but will be a model in construction. The lighthouse is to have eight floors, besides the lantern gallery and watch room. The first will be equipped with three life boats, with a crane for hoisting or lowering on the outside. The second floor will be divided into four rooms, containing the fog signalling apparatus and two oil engines. The third floor will contain the hoisting engine for operating the crane, two large provision rooms and a bed room. The fourth and fifth floors will each have two bed rooms, a writing room and a bathroom. One-half of the sixth floor will be devoted to the dining room, the other half to the kitchen, pantry and refrigerator. The seventh floor will have a double sitting room or library and a laundry. On this floor also will be placed a tank holding 1,600 gallons of fresh water. The eighth floor will be properly equipped for the lighthouse service room. The ninth floor will contain the watch room, and will have a gallery extending all the way around it. The floor above this will contain the light itself, visible in storm or calm for about twenty miles.—*Technical World Magazine*.

CONSTRUCTION.

(Continued from page 3.)

American Specifications for Stone.

The changes that have been brought about in the writing of specifications in the United States by the development of building methods can scarcely be realized except by an architect or building contractor of very long experience, says Mr. Francis W. Hoyt, in the *American Architect*.

One branch of specification writing, however, has shown little improvement, namely, that which relates to stonework and the choice of stone.

During the past quarter of a century decided progress has been made in the study of economic geology. When the science was first taken up as a proper subject for Governmental and State investigation, the geologists devoted all of their time to paleontology, and the establishment of the correlation of the different geological horizons. These abstruse branches still claim most of their attention, but a few have given extended investigation to economical features. The first real work in this line was done, not in America, but in England. The Royal Commission appointed, about the middle of last century, to make a choice of a suitable stone for the new Houses of Parliament, went to work most carefully, but in a crude way. Unhappily their selection of the Yorkshire magnesian limestone has disappointed all expectations, for the stone has disintegrated sadly and has proved nothing like as durable as the Portland oolite. The work of the commission, however, no matter what its outcome, was a move in the right direction.

British architects, Mr. Hoyt observes, are usually much more precise than their American brethren in stone specifications. "Most stones vary more or less in the different strata or beds, and in England each bed is named. For particular work the English architect specifies, not only the variety, but also the exact bed from which the stone he desires must be drawn. We have not yet reached this degree of particularity, but it would add to the uniformity and durability of our stonework if architects would make a greater effort to familiarize themselves with what has already been accomplished in economic geology. The trouble is that the subject is nowhere taught, and that the literature is widely scattered in dry State and Government reports. The one popular work on the subject is, 'Stones for Building and Decoration,' by Prof. George P. Merrill, of the National Museum."

The points which are important to consider, if one would write stone specifications that will leave no loopholes for dishonesty or slackness, are the mineral and chemical composition of a stone, strength and durability, effect of weathering, porosity, texture and crystallization, mode of occurrence (whether massive or stratified), freedom from impurities, and method of quarrying. There have been so many serious delays in the furnishing of stone for important buildings that it is getting to be the custom for architects and building committees to inspect competing quarries before large contracts are given out. The man who writes the specifications should also have the benefit of extensive quarry observations, if he is to do his best. A study of the weathering of stone can be made with far better effect as it lies in its natural bed than after it has been placed in a building.

In the Tenth Census is given the following table of the "life" of the various kinds of American building stones, by the term "life" being understood the number of years that the stones have been found to last without discoloration or disintegration to the extent of necessitating repairs:

	LIFE IN YEARS.
Coarse Brownstone	5 to 15
Fine laminated brownstone	20 to 50
Compact brownstone	100 to 200
Coarse fossiliferous limestone	20 to 40
Fine oolite (French) limestone	30 to 40
Marble, coarse, dolomitic	40
Marble, fine, dolomitic	60 to 80
Marble, fine	50 to 100
Granite	75 to 200
Gneiss, fifty years to many centuries.	

The above table is only a rough help to the specification writer. Each stone must be studied by itself without regard to its class. There are granites that have begun the process of disintegration before ever they are quarried, and their term of life is short. There are also compact brownstones in which the cementing material has lost its cohesive qualities, so that the grains of

silica and quartz crumble apart like loaf sugar. There are, on the contrary, coarse brownstones, like Runcorn, that absorb water like a sponge, and yet have excellent durability.

Continuing, Mr. Hoyt says: "A great deal of stress is laid on the strength of stone. When crushing tests show a high result, the producer of the stone makes a leading argument of the fact in favor of his material. For ordinary building purposes it makes no practical difference whether a stone can withstand a crushing test of three to four thousand, or thirty to forty thousand, pounds per square inch. A variation of thousands of pounds in crushing strength can be shown by stones from the same quarry, merely by the skill with which the cubes are prepared for testing."

Special care should be observed, of course, in the preparation of specifications for additions to existing buildings unless contrast is sought. It is not enough to call for stone of the same general class and appearance. Chemical analysis, texture and strength must be taken into account. An instance showing the danger of using two different stones in the same building is furnished by the State Capitol of Washington. Use was made of two sandstones from different localities, that appeared almost identical at first, but under the influence of weathering they grew very dissimilar. An effort was made to bring the inferior stone back to its original appearance by the use of acid washes, but it was an unfortunate expedient, for the treatment only made the defects worse.

As another example illustrating the necessity for taking the greatest care in specifying stone, we may turn to one of the most conspicuous and important public edifices in New York, built of the most coarsely crystalline of the carbonate of lime marbles. Some years after it was erected it was desired to build an addition. The choice fell on a very fine-grained dolomite. The former stone is noted for its non-absorbent qualities. A drop of red ink can be allowed to stand on its surface for hours, and when washed off leaves scarcely a trace. The dolomite absorbs the ink as a lump of sugar takes up coffee from a saucer. It needs no scientist to predict what a lack of harmony there will be between the original building and the addition in a few years' time. If the specifications had been carefully drawn so as to require an accord between the stones of the two parts, the choice of this particular dolomite would have been impossible.—*Builders' Journal and Architectural Review*, London, Eng.

Big Apartment House on Central Park, West.

Plans were filed on September 25 for a new twelve-story apartment house to be built on Central Park West, New York, at the northwest corner of 85th Street, for the Gotham Building and Construction Co., of which Henry L. Felt is president.

The building will stand on a plot 100 by 140 ft., and will cost \$950,000.00, according to the estimates of Architects Milliken & Moeller.

\$1,000,000 in Contracts for Better Roadways.

In the last few weeks the State engineer of New York State has awarded contracts for the construction of scores of miles of good roads. Almost thirty counties are taking part in the good roads campaign. The total amount to be expended exceeds \$1,000,000.00. This is the result of the passage of the \$50,000,000.00 amendment to the State constitution, which authorizes the expenditure of \$5,000,000.00 a year for ten years.

Among the largest stretches of road to be constructed is one of twenty-two miles from Utica to Oneida castle. It will cost \$133,000.00 to lay this road in modern style. A link of seventeen miles from Geneva to Canandaigua also is to be added to the good roads chain from New York to Buffalo.

Ulster County is to spend \$200,000.00 this year and Saratoga County will pay out \$178,000.00 for the same purpose. The old Peekskill-Salem turnpike will be reconstructed at a cost of \$77,000.00.

When these improvements are made the run from New York to Buffalo will be made easier and may take precedence over the shorter Southern Tier route, if the latter is not improved.

Prominent Operators.

AKRON, OHIO, September 14.—The Robinson Clay Product Co. are manufacturers of sewer pipe, wall coping, drain tile, fire brick, flue linings, etc. They have an immense plant and have been very busy during the past season with bright prospects for future business.

Architectural.

Berlin Architecture Criticized.

An English writer takes a fall out of German architecture in the *Builder's Journal* of London. This is what he says:

"Berlin was a very unassuming business city till after the Franco-Prussian War, for it was with the millions extracted as war indemnity from France that Imperial Government set about adorning its capital. The palace and the old Brandenburger Thor, at the entrance of the park, gave the cue to the city improvements commission; and the great boulevard known as Unter den Linden connects the palace with the park. A glance at this quarter of the city shows how active the authorities have been during the last thirty years; for the 'Prussian Diet,' the 'Reichstags gebäude' or Imperial Parliament House, the Museum and Picture Galleries, and the Cathedral, are all modern; as are also the University buildings and technical schools, which, under so paternal a Government as that of the Hohenzollerns, may well be classed as official. These buildings need not detain us long. They are all externally well built and ably planned. They all lack to my mind the highest qualities of architecture. It is remarkable that the Teutonic temperament, with all its intense sentimentality, extreme earnestness and enormous vigor, falls so conspicuously in the arts. The essential coarseness of fibre in the German character permeates German art. The natural graces of the national character, the kindness, the sympathy and the culture seem strangely enough to fail to find expression in their art, and particularly in their official art, which is somehow always imbued with the bombastic swagger of the jingling spur and the mailed fist.

The Intemperate Swagger of German Heraldic Decoration has pervaded the Denkmäler, or monuments, with which a keen-sighted Government has adorned the city and advertised the virtues of the Imperial house it serves.

"Opposite the Palace is an equestrian statue of the grand old Emperor William, backed by a colonnade and surrounded by lesser groups. The whole conception is in the grandiose spirit introduced into architecture and sculpture by Michael Angelo and elaborated under Louis XIV. It is art of the kind which supplies all the needs of the beholder—a great banquet, if you like, and you must taste it all. Nothing is suggested and nothing is veiled in mystery.

"Then again in that splendidly kept park, the Thiergarten, where, in order that the green carpet may reach to the very roots of the noble trees, different varieties of grass are carefully grown, we have an all but grotesque exhibition of imperial pride.

"The Kaiser's Statues.

"Leading from the most blatant of all monuments of victory, which celebrates the Franco-Prussian War, we find a noble avenue lined on one hand with a set of monuments illustrating the long line from which the Emperor springs. Now, many of these ancestors were very ordinary princelings, and some were quiet nonentities, while the great Frederick and the old Emperor William were men of international scale. I suppose the fact which the designers wish to express is that all these persons were equally great, and mainly great because they were ancestors of the Kaiser. Anyhow, they all have equal honor done them in a series of designs in various styles, all of a size and all of one scheme. In the focus of raised semi-circle of white marble stands the ancestral prince, while on the dies of the balustrade behind him are found busts of his two chief advisers. The national passion for order is well evinced in this absurd scheme, for if the old Emperor William, Moltke and Bismark make a good

trio it does not follow that the local nonentities of Prussian administrators in other periods deserve recognition at all. This is not the way to express history in art—one page to the man: it is neither good history nor good art, and the chief interest to a designer is to note the cold, scholarly ingenuity with which something of the decorative method of many centuries has been applied (I use the word 'applied' advisedly) to a Greek semi-circle garden seat that focuses on the back of a Kaiser's ancestor, which appears of absorbing interest to the two henchmen behind."

ARCHITECTURAL VERSUS ENGINEERING REQUIREMENTS.

BY J. T. WALSH.

(A paper read before the Structural Association of San Francisco, July 26, 1906.)

The design and construction of any structure is primarily influenced by the purpose which it is intended to fulfill. Skill and ability on the part of the owner, architect, engineer and contractor, are requisite in order that the best results may be accomplished.

The ability of the owner, usually a man conversant with financial questions, is exercised along these lines; the architect's talents are employed along the lines of general design and supervision; the engineer is interested in problems involving strength and stability, and the contractor in the execution of the work. Each one is a specialist, but all are jointly interested and working toward a common end. This is following out the modern idea of specializing, without which it would not be possible to create and successfully execute the large projects for which our country is justly famous.

The successful architect of to-day is no longer a builder, as he was in years gone by. Conditions always changing, have caused the sub-division of the work, until now it is practically impossible for one man to be familiar in detail with all the problems that arise in the design and construction of a modern building.

There is perhaps no one profession that requires a broader general knowledge than that of architecture, and the architect who uses his talents and education along the lines of general supervising, and who realizes that the best results are obtained only by employing men who have special training, is the architect who builds well, and who will eventually command recognition.

An architect's training at the present time is principally of design, and many of our modern structures are the creation of men who are noted more for their artistic abilities than for their actual knowledge of materials and construction.

The various classic orders with which the modern architect is so familiar, play an important part in the design of buildings even at the present time, and it is not uncommon to see structures erected, true in classic proportions, but in which the fundamental idea underlying the origin of these designs has been entirely forgotten.

The strength of materials was the principal item that influenced the earlier types of architecture. The early builders gained their knowledge through experience in working with the materials, and not as architects do at present, by consulting hand-books.

The early Greeks found that a stone lintel of certain proportions would safely span a certain distance. This determined the spacing of columns, and a type of building was evolved. The Romans desired larger buildings and evolved the arch to aid them in erecting these structures. These two cases serve to illustrate the fundamental idea underlying the origin of these two types of architecture.

The modern architect has much greater freedom in design than did the early Greeks and Romans, for he has the same materials in which they worked and others in addition, which if regarded from the standpoint of strength, are vastly superior to those employed by the ancient builders.

The architect in adhering to classic proportion, quite often creates problems which, viewed from an engineering standpoint, are quite incon-

sistent with the original idea; as for example, the use of a massive lintel which in itself inspires the idea of strength, but which in reality is dependent upon the strength of steel, hidden behind it, for support. We frequently notice in the facades of our buildings imposing stone columns which, as far as purposes of strength are concerned, are useless, but which are employed to give artistic effect to the building. Many other cases might be cited to show the various means in which architects resort in order to obtain the required artistic effect.

The use of re-inforced concrete, which also recommends itself on account of its strength, will develop a type of building which will, at least, be consistent with the idea of strength.

The writer believes that the architect has some very interesting problems to solve, particularly in regard to the artistic design of re-inforced concrete buildings. Probably no other section of the country is interested as much as we are, and there is a grand opportunity for San Francisco architects to develop a type that will bring great credit not only to themselves, but also to this section of the country.

Steel, however, is not capable to any great degree of artistic treatment in its use in a tall building, but that is no reason why it should be regarded as of but slight importance by the architect. Competent engineers have made possible the design of important structures, and some credit is due them for their work. There is no reason why an architect may not be conversant with engineering problems and details, but the ability to figure a beam uniformly loaded, or a column under a direct load does not necessarily mean that he is capable of designing an important steel structure. The function of the engineer is to settle all points governing the strength of the structure, and the architect should hesitate before changing or altering the engineering design, unless it has first been considered by the engineer. The general design of any important building is one that is usually a compromise between engineering and architectural requirements, and this is as it should be.

The engineering requirements for the reconstruction of San Francisco are such that it should be impossible for irresponsible parties to design important structures. Unfortunately, it is not improbable that many buildings will be erected in which a woeful lack of knowledge and experience will be apparent to an experienced engineer, and it remains to be seen if the architects, who have this matter almost wholly in their hands, will be willing to safeguard the owner's interests as they should be guarded.

Other cities have made a very difficult matter for architects to erect buildings that do not conform to ideas of good engineering, and as inferior design will eventually reveal itself it would seem that more and better precautions should be taken, if not by the city at least by owners and architects.

It has not been the purpose of this article to criticize, but rather to express a few ideas that appeal to the writer, and which it seems are particularly applicable at this time.

People all over the country are watching the growth of the new city, and with us, architects and engineers, specialists or otherwise, rests entirely the successful rebuilding of San Francisco; and our work will be a credit to us if only we put forth our best efforts and perform our work honestly and conscientiously. Then success will be assured and we will reap as we have sown.—*American Builder's Review.*

Another New Company to Start Operations in Queen's Borough.

Large building operations are expected to follow the incorporation of the Thomas E. Crimmins Real Estate and Construction Co., the formation of which has just been announced. The capital of the concern of which Abraham Schwab is to be president, is \$500,000.00, and it is understood the concern will exploit Queens property. Building operations have already commenced on the big Wilson nursery tract, purchased some time ago by John D. Crimmins, who, with his father and brother, was foremost in the development of the Yorkville section of Manhattan Island. Several streets have been cut through, graded and sewered on the Wilson tract, so that it is now accessible from the main thoroughfares of Astoria and the lower section of Long Island City.

From Our Own
Correspondents.

CHICAGO, ILL.

CHICAGO, ILL., September 29.—To the great relief of everybody engaged in outdoor work the long, hot spell has passed and all workers in stone are much gratified. It is the prevailing opinion among the stone trade, that the season thus far has been one of the most prosperous in Chicago for many years. In speaking of contracts entered into during the season, one authority says that they have been taken at low prices on account of the close competition which exists in nearly every department of the trade.

The stone yard of Henry Struble & Co., on Fortieth Street, near Vincennes Avenue, is rather quiet and Mr. Struble's son states that business was very quiet at the present time and had been so for two or three months. Mr. Struble is engaged at present in finishing up odd jobs taken during the summer months. The five or six stone yards which occupy the space between Thirty-third and Thirty-fifth Street on La Salle Street, were found to be busy with a full force of hands. At the yard of A. F. Gibson & Co., 3327 La Salle Street, a serious accident occurred on last Thursday, by the fall of the huge derrick. It came down with a tremendous crash, shivering the heavy timbers and breaking several blocks of stone. Very fortunately, however, no one was injured. Mr. Gibson said the fall of the derrick was the result of gross carelessness on the part of the workmen engaged in handling it, and the damage done amounted to something over \$500.00. Mr. Gibson immediately ordered a new and larger derrick constructed and this is now being erected in place of the one destroyed. Business is fairly good and at the present time a full complement of men are at work. Prospects are good for a continuation of work during the balance of the season.

At the nearby yards of Mr. John Tait a considerable force of hands is now employed getting out the first stone for the new Auditorium annex for which he has the contract. The stone used in this instance is from the quarries at Bedford, Ind., which is so generally used by the leading stone yards in the city. This contract will keep Mr. Tait busy during the entire winter season. Further developments in the stone business at Mr. Tait's yards are expected to be given out in time for production in Rock Products in the early November issue. Mr. Tait says that the season so far has been an excellent one and that he will have plenty of work on hand for many months to come to keep a large force of hands employed.

Close by is the large stone yard of Olsen & Nelson who are both experienced stone cutters and through their thorough knowledge of the business have made their large plant a very successful one. Mr. Olsen says that business continues fairly good and they will be enabled to furnish employment for their men during the winter months. In the two or three yards adjoining, no special information was gathered, business being fairly good but not rushing.

A. E. Sward & Co., Thirty-third Street and C. R. I. and P. R. R., near La Salle Street, are well known cut stone contractors and have been established in business for a number of years. Their business has been most excellent throughout the season and they are now closing up their contracts as fast as possible, hoping to complete many of them before the cold weather sets in.

The Federal Stone Co., having an office in Chamber of Commerce, have valuable quarries at La Grange, Ill., are producers of large quantities of crushed stone. The firm reports the season's business as having been far beyond their expectations, and there has been a constant demand for all the crushed stone they could turn out. They say the crushed stone business has grown to one of great importance, and if their works had double the present capacity they would hardly be able to supply the demands.

Mahan & Co., 908 Chamber of Commerce, with quarries and mills near Bloomington, Ind., say their quarries and works have been very busy throughout the season. From that point they ship large quantities of Bedford stone to many different cities, a considerable proportion of which finds its way to Chicago.

The Chicago Cut Stone Co., 2403 La Salle St., report that business is good and prospects flattering. They have had a fairly good season thus far and have no complaints to make.

Thomas B. Ray, Chamber of Commerce, handles Bedford stone entirely, and report business excellent.

The Young Stone Co. control four large yards and report business with them fairly good. They have had a busy season from the opening up to the present time.

The Western Stone Co., offices in the Chamber of Commerce Building, report business continues good and prospects are entirely satisfactory. The Dearborn Cut Stone Co., located at Dearborn and Sixty-first Streets, report business fairly good. The season has been a good one with them and prospects are excellent.

A number of stone men in Chicago say that prices here are lower than in any large city in the Union.

S. Krug, having main salesroom and yard at Thirty-fifth and Wentworth Avenues, with an office at 167 Dearborn Street, reports the granite business in fairly good condition. All the granite in the old courthouse which was recently torn down, was purchased by Mr. Krug and he now has for sale large quantities of granite at reasonable prices. The demand for granite for building and ornamental purposes has been steadily on the increase during the past two years, and this condition is likely to continue on a larger scale next year, when some fine, large buildings are to be erected in the down town district. Mr. Krug is disposing of a considerable amount of granite columns suitable for cemetery uses, most of which are already polished. They are offered for sale at low prices.

The Wisconsin Granite Co., with offices in the Chamber of Commerce, has had a very successful business almost from the start. Their quarries are located at four or five different points in Wisconsin and vary in qualities according to location, most of it being adapted to a high polish.

J. H. Anderson Granite Co., Chamber of Commerce, are large dealers in granite suitable for monumental purposes. In fact this is the one special feature of their business. The firm is one of the best known in this line in the city. Their factory and show rooms are located at Rose Hill cemetery where they have at all times a number of elegant designs in granite.

The Western Consolidated Granite Co., 520 Chamber of Commerce, report the granite business as fully up to their expectations, and they have done a fine business throughout the season, though the strong competition existing among the various dealers has caused prices to rule much lower than they should be. The profits on granite are not large and it requires large sales annually to show anything like a fair profit in the footings. The Western Granite owners are endeavoring to supplant the sale of Eastern and Southern granite, and to accomplish this dealers in granite say there is not a great deal of money in the business. The granite for the new courthouse is now being supplied in such quantities as will enable the builders to make good progress before the winter season sets in.

F. J. Malley & Co., dealers in marble and mosaic work at 289 E. Fortieth Street, report their business as on a fairly good basis, and the sales of marble so far this season have come up fully to their expectations.

The Vermont Marble Co., 570 North Water St., where they have a very large yard, has been receiving large consignments of marble during the entire season, and report their sales as being considerably in excess of those of last year. The demand for marble for ornamental uses in fine buildings has increased during this season to a very large extent. The down town district, where so many large structures are going up, using large quantities for stairways, floors and for various ornamental purposes. Four other marble firms were visited but nothing of an important nature was solicited except that the marble business had been remarkably good during the season.

THE WEST COAST.

SAN FRANCISCO, CAL., September 22.—The San Francisco, building situation is in a healthy condition and before the heavy rains commence quite a showing will have been made in the erection of several hundred new permanent structures as well as the thousands of temporary structures that have been built during the first five months that have elapsed since the disaster. More foundations for large buildings would have been started by this time had it not been for the very unsettled condition of the labor market in the building trades and other lines. This, combined with the extremely high prices of lumber and various other building materials, has resulted in delaying the commencement of actual work on numerous large business blocks down town until next spring, although the debris will be cleared off the lots and everything placed in readiness for rushing the work early next year. Many buildings, however, will go ahead as soon as the foundations can be put in regardless of weather as it is not severe enough here during the winter to prevent working, although the expense will be a little greater. However, if the building boom that is expected next spring and summer materializes, the demand for labor will be so increased that there will probably not be sufficient men to erect half of the buildings projected. So the contractor who makes good use of the winter months will be wise, especially as good cement for foundations and reinforced concrete walls is now much cheaper than it has been for many months past, owing to the excessive amount imported since the fire. If the prices of labor and lumber continue to advance next year, some of the new building work now in plan will undoubtedly be held up indefinitely, but there will be enough buildings imperatively needed for business purposes by the owners or property and other business men to keep all of the contractors and artisans busy throughout the season.

Owners of quarries and contractors say that the work in architects' offices and under contract which they have been figuring on makes the outlook very satisfactory for all kinds of building stone and marble as well as cement and sidewalk and roofing materials. There will be a firm market at good prices for everything in the line of building materials that can be delivered in San Francisco in good condition for the requirements. The fact that all of the large stoneyards in the city were destroyed by the fire, and that probably only two or three will be ready to operate their new machinery before the first of the year, makes it fortunate for stone men that the erection of the large new stone buildings contemplated have been somewhat deferred. Dealers in building stone and marble are making every preparation for a heavy rush of orders and new quarries are being opened in California and in the Pacific Northwest to supply the expected demand for the rehabilitation of San Francisco.

The quantity of paving stone, cement and bituminous rock required for the reopening of the streets that are almost ruined by the fire and earthquake, will be enormous in the aggregate, although the work may have to be distributed over quite a period of time as the reconstruction of buildings, etc., may take precedence over the repairs of streets except on the principal thoroughfares. The broad stone and concrete sidewalks along Market Street (20 feet in width), were almost entirely ruined by the fire and the expense of replacement will be heavy. Sidewalks with granite flagstones and curbs, spalled badly from the fire. The 20-ft. marble sidewalks around the Palace Hotel went through the fire with scarcely any damage. They were about three inches in thickness.

The walls of the Palace Hotel, seven stories in height, are being taken down under the superintendence of Mahoney Bros., preparatory to the erection of a new ten-story hotel, costing about \$3,750,000.00, preserving the main features of the old structure, but being fireproof. There will be a palm garden in place of that destroyed feature of the old Palace. Instead of being in the center of the structure the new palm garden will be located at the Jessie Street side of the building, partly in an open court which may later be surrounded by an extension of the main structure. A number of new features will be added, bringing the Palace again up in the front rank of modern hotels. The Palace Hotel Co., which has been incorporated, includes among its largest stockholders, Senator Newlands and Lady Hesketh, the daughter of Senator Sharon, and Mrs. Fred Sharon.

"Rock Products" Covers the Earth.

The reconstruction of the principal Class A buildings down town which passed through the fire without damage enough to cause them to be condemned, is progressing well, and by the first of January there will be quite a nucleus of skyscrapers in the business district displaying their former life. The Mills Building is the only exception. It was found that a large percentage of the upper eight stories of pressed brick would have to be taken down and it is stated that the structure is perhaps six inches out of plumb so that reconstruction would be very expensive. The result is that D. O. Mills, the owner, has deferred rehabilitating the building for the present in the hopes that the excessively high wages and other troubles that builders have to contend with will be modified after a few months. Repairs to the eleven story Kohl Building have been practically completed, a number of pieces of sandstone in the fronts that were damaged by fire having been replaced, and the building is tenanted from basement to attic. The estimated cost of repairs was about \$100,000.00. The big job of replacing 60 per cent of the brick work and all of the plastering, plumbing, etc., of the 14-story Merchants' Exchange Building is fully under way and most of the condemned bricks have been removed. It will probably take six months to complete the work. The Assembly room on the ground floor is being occupied and also the basement, which was undamaged. Repairs will cost \$700,000.00 or more, it is estimated. The Union Trust Co.'s stone and brick building is practically reconstructed and is partially tenanted once more. Work is well under way on the Crocker Building, constructed of sandstone and brick, which shows but little damage to the outside walls. The 12-story sandstone James Flood Building will be occupied by the Southern Pacific Railroad Co., with its general offices within two months, the repairs costing less than \$100,000.00 it is said, though considerable remodeling is being done to adapt the building for ticket offices on the ground floor, and for a variety of offices and drawing rooms up-stairs.

THE NORTHWEST.

MINNEAPOLIS, MINN., September 26.—The building season is drawing to a close, although there will be a vast amount of building done between now and the final freeze-up. There are a number of large buildings in progress at this time, and much work remains to be done. The bulk of work leaves a shortage of laborers at times, especially of the common labor variety. Men with teams are also wanted and have the satisfaction of having their services eagerly sought.

The amount of reinforced concrete fireproof construction this season will be a large gain over all previous years. Practically all large jobs have been of this class of construction, with a few exceptions. The popularity of this form of construction shows no sign of waning.

Cement remains steady at about the same prices which have ruled for two months past, but supplies are limited and contracting is limited to small quantities. It would be nearly impossible to get a contract for a large quantity of cement, because of the uncertainty of being able to fill the order. Cement is being used everywhere and in everything.

The common brick season has been an excellent one and brick manufacturers propose to run their plants as late in the fall as is possible. They find a ready demand for their product, and will need all they can carry over for the early spring demand.

Cut stone work continues to enjoy a good trade and there have been a number of jobs calling for a better than average supply of work to enter into buildings for the season.

Less is heard of the concrete block proposition, but the blocks are going into consumption regularly, and have lost their novelty so there is less talk of them. Foundation work calls for them as frequently as stone for residence building.

General Notes.

The use of concrete mixers is growing rapidly in the Northwest. A good many firms making blocks, have installed them because the scarcity of labor made it impossible for them to put out blocks without installing a mixer. The results have always been satisfactory.

W. D. Rowe, a Crookston, Minn., concrete walk manufacturer, recently built a concrete mixer for his own use. He had it mounted on trucks, for

transporting from place to place, and equipped with a 4 h. p. gasoline engine.

Bertrand & Chamberlin, the Minneapolis architects, recently issued a pamphlet on reinforced concrete, with profuse illustrations of buildings erected on their plans. This firm has probably planned more concrete structures in the Northwest than any other single architectural firm.

Granite operators at St. Cloud, Minn., are way behind on orders because of inability to secure competent workers. They have tried every way to get additional men.

G. H. Perry, the proprietor of the granite plant at East Sioux Falls, S. D., has installed considerable new machinery. They include electric motors, air compressors for drills, hoists and other machines.

It is proposed to install a cinder crusher at the new garbage crematory being built in Minneapolis, and crush cinders for use in concrete work. Cinder concrete has not been used very much in the Northwest, but it is being tried occasionally.

The building inspection department in Minneapolis, has just installed a complete outfit for testing concrete blocks. The machine is worth \$5,500.00.

Hutchinson Bevier, of Duluth, Minn., has taken out a permit for the construction of what is termed a coke cinder concrete dwelling. Owing to the porosity of the coke, he will coat the exterior of the dwelling with pure cement, and believes that the result will be a water tight dwelling. It will be of monolithic construction. The roof will also be coated with pure cement. Tests have been made of blocks made of the coke and cement, with good results. Heated upon a hot stove for an hour, a block was still cool enough to handle with the bare hands. Another block was buried in hot coals and heated for some time, after which it was plunged into cold water, without affecting the block or burning the coke. The cost of the cottage, 22x28 feet in size, with a rear addition, 12x24 feet, is estimated at slightly over \$200.00 for the materials exclusive of the interior finish and woodwork. The building inspector issued a permit for the building, after making tests of the concrete.

On the concrete work in the Belle Fourche, South Dakota irrigation project, gravel has been hauled a distance of six miles. Traction engines have been used to haul a train of five wagons, each holding about seven cubic yards.

The Flour City Cement Block and Machine Co., of Minneapolis, is a new concern just incorporated, with a capital stock of \$100,000.00. The incorporators of the enterprise are: John Nodoff, C. A. Huffman, Edward P. Elliott, William N. Box and Theodore H. Brown.

C. J. Swanson, president of the Northwestern Brick and Fireproofing Co., of Minneapolis, with yards at Fridley, Minn., was nominated on the Republican ticket for senator from the forty-fifth district. He has no opposition, so will certainly be elected. He carried his home town almost unanimously, there being but one vote for his contestant at the primary election.

Among Flour City Builders.

J. L. Robinson was the successful contractor in the bidding for the Alice L. Hall Building, to be erected at 1017-31 Nicollet Avenue, corner of Eleventh Street. But two stories are to be constructed now, the remaining three stories being left for later on. The building will be of reinforced concrete construction, 57x165 feet in size.

N. C. Eldridge will erect a two-story brick block at Cedar and Minnehaha Avenues, on plans by E. C. Haley, architect. It will be 44x56 feet in size, of pressed brick.

Frank E. Joneson will erect a two flat building 2415 Chicago Avenue, on plans by A. Levander, architect. It will be of pressed brick.

Edwin H. Hewitt, architect, has completed the plans for the George H. Christian tuberculosis sanitarium to be erected on the bank of the Mississippi river and Lake Street. It will be of brick and stone construction with all modern sanitary equipment. Cost \$40,000.00.

J. & W. A. Elliott, of this city, received the general contract for the construction of the fire station for Menomonie, Wis. It will be two stories and basement, 36x60 feet in size. Cost \$5,000.00. A. H. Shaper has the general contract for two brick flat buildings at 1924-30 Aldrich Avenue, South, for Harry Tumansky. Each will be 44x66 feet in size, two stories and basement, of pressed brick and cut stone, modern throughout. Cost \$15,000.00.

Mrs. Bradley will erect a brick store building at Selby and Brotto Streets, on plans by Louis

Lockwood, architect. It will be 41x60 feet, two stories.

The St. Paul Gas Light Co. is erecting a brick and concrete power house at Fourth and Olive Streets. Newman & Hoy have the general contract for the building which will cost \$12,000.00.

The Great Northern Railway Co. is erecting additions to its shops, and a new brick and cut stone warehouse, altogether costing \$30,000.00.

Butler Bros. have the contract and have started work for a brick and concrete building for the Malleable Iron Works at Wells and Forrest Sts. The work complete, including the equipment for the plant, will amount to \$125,000.00.

The Twin City Brick Co. secured the contract to furnish 150,000 of their pink mottled press brick for the exterior walls for the new high school at Escanaba, Mich.

George J. Grant received the contract for the excavation and foundation work for the Y. M. C. A. building at Ninth and Cedar Streets, on plans by Clarence H. Johnston, architect, at \$16,700.00.

Thori, Albin & Fisher, architects, have plans for a small brick bank building, 52x60, one story, for the First national Bank of Roseau, Minn.

The school district at Owen, Wis., will erect a brick addition to the school, on plans by Thori, Albin & Fisher.

Frederick Alther has the contract for the erection of the Great Northern roundhouse at the head of Jackson Street. It will be about 300x350, of Kettle River sandstone, brick superstructure. Cost \$60,000.00.

The Masonic Grand Lodge proposes to raise \$100,000.00 for the construction of a Home for the Aged.

Butler Bros. were awarded the general contract for the wholesale warehouse of Lindeke, Warner & Sons. It will be 165x235 feet in size, seven stories and deep basement, on Fourth St. from Broadway to Rosabel. St. Louis steel gray pressed brick, and Bedford cut stone trimmings will be used. The interior will be of reinforced concrete construction, using the Turner mushroom system. Cost complete, \$400,000.00. Louis Lockwood, architect.

Buechner & Orth, architects, have plans for a lodge building to be erected for the Modern Woodmen of America on Payne Avenue. It will be 55x100, two stories and basement, pressed brick front. Cost \$20,000.00. Contracts will be let during the winter.

The St. Paul Building Co. has the contract for a brick building on Hall and George Streets for Verstraete & Krankot. It will be two stories, 45x62 feet in size, pressed brick front. Cost \$10,000.00.

The board of education will erect a \$30,000.00 addition to the John Ericson school at Edgerton and Jenks Streets.

Thomas Fitzpatrick & Son have the contract for repairing the Stronge & Warner Co. building at Seventh and Minnesota Streets.

R. B. Pelton received the contract for the erection of a park pavilion at Loring park, to be of frame construction, 34x60 feet, with reinforced cement plaster exterior. Cost \$10,000.00.

Aug. Uihlein has awarded a contract to Lindquist & Noren for the erection of a brick store building at 1727 Second Street North. It will be 52x58, with flats above. Cost \$11,000.00.

Brown Bros. Mercantile Co. have started work for a brick addition to their building at 21 South Sixth Street, to be 24x86, three stories. Cost \$10,000.00.

J. L. Robinson received the contract to erect the superstructure of the J. I. Case Threshing Machine Co. warehouse at 701-705 Washington Avenue South, on plans by Kees & Colburn, architects. The foundation of concrete is in. Cost \$50,000.00.

Pike & Cook are erecting a brick warehouse at the freight station of the Chicago, Rock Island & Pacific Railway. Cost \$11,000.00.

A change of arrangement has been made and the Powers Mercantile Co. has leased the corner at Fifth Street and Nicollet Avenue, on which work had been started for a six story building for Yerxa Bros. & Co., grocers. The Powers Co. will build the space up to correspond with their own building, giving them an addition, about 66x110 feet in size, four stories and basement. C. F. Haglin, who had the contract for the Yerxa building, had considerable iron work and fireproofing ordered. He also has the contract for the addition to the Powers structure. The work on the addition will be hurried and it is expected to be able to have the ground floor in by the first of the year and in shape for occupancy.

PITTSBURG AND VICINITY.

PITTSBURG, Pa., September 29.—Since our report last month, we are glad to be able to report that conditions in the granite and marble lines in this city and vicinity have picked up in a very gratifying manner, and that almost all of the individuals and firms engaged in this work are busy. October gives every promise that it will be one of the largest months of the year in the actual volume of work, and all expect to be very busy from now until the cold weather sets in.

This is not all new work, however, for there is a great deal of repair work being done in the cemeteries particularly, and the demand for small stones, such as markers, etc., is very great.

Building operations are strong, with every indication that there will be a continuance far into the winter months. Stone residences continue to be in great favor and the demand for stone suitable for this class of construction is great. There is practically no change in the call for granite and marble of the better grades, both of these products having long ago established themselves as staple in the construction of large office and business buildings. Building construction for the month of September, up to and including the 26th, amounts to \$5,666,000.00, and for the year to and including the same date, the figures are \$54,618,000.00. While this is somewhat behind the record of last year, which is principally due to the labor troubles that have been current here in different trades since April, it is thought that when the year has closed, there will be very little difference in the totals of the two years.

Contractors A. & S. Wilson, Pittsburg, are making good progress with the building in placing the granite work on the two 20-story buildings on Fourth Avenue for the Union National Bank and for the Commonwealth Trust Co. There is a large amount of heavy granite going into these buildings, many of the blocks weighing from five to twenty tons.

Announcement is made that the marble and granite firm of E. L. Kelton & Son, Inc., Erie, Pa., will considerably enlarge the business, and install additional facilities at their plant in that city. The firm is one of the oldest in Western Pennsylvania.

A fine monument to commemorate the Battle of the Monongahela will be erected a short distance from this city, where the famous battle of July 9, 1755, was fought, and Gen. Braddock met defeat.

Milford J. Murray and C. F. Murray have purchased the burial vault, marble and granite stock and business of the late R. H. Frey & Son, of Blairsville, Pa., and will conduct the business in the future. They will also handle Portland cement and do all kinds of cement work.

Elijah N. Palmer, one of the oldest established marble dealers in this part of the State, died at his home at Everett, Pa., early in September. He was 64 years of age and had been in the marble business for thirty-five years consecutively. He was a veteran of the Civil War. The business will be continued by his son, Frederick V. Palmer, also of Everett.

The East End Construction Co., of East Liverpool, Ohio, has opened a large new gravel bed in that city. An opening has been made in the hill side, a tramway built to the road, and the wagons loaded in this manner. There is a plentiful supply of material in sight, and is in such shape that it is easier to get at than by dredging for it.

Pittsburg, Pa., and East Liverpool, Ohio, capitalists have decided to reorganize the Blue Ridge Kaolin Co., which controls 600 acres of fine spar land in Virginia. The new company will be capitalized at \$60,000.00, and will develop the entire field on a large scale.

R. H. Koontz, of Greensburg, Pa., one of the leading marble and granite dealers of this district, has enlarged the capacity of his work there. He has installed new machinery, putting in electric power instead of the old gas engine equipment that he formerly had. He had also installed a new compressor, and new pneumatic tools. The works have just double the capacity that they formerly had. Mr. Koontz announces that on January 1, next, he will admit as a partner, Mr. M. A. Woodruff, who is now a traveling salesman for the wholesale granite and marble house of Townsend & Co., of New York City.

A charter will be asked for in October for a corporation to be called the Derry Glass Sand Co. The parties behind the movement are Julian B. Huff, Marcus W. Saxman and H. C. Butterbaugh.

The company will mine, quarry, excavate and bore for coal, limestone, sandstone, fire clay, iron ore and other minerals, and will convert them to coke, lime, building stone, sand, brick, tile, iron, steel and other manufactured products. The company controls considerable real estate.

Almost the entire plant of the Croton Limestone and Brick Co., in Hickory Township, near New Castle, Pa., was destroyed by fire last month. The loss is placed at about \$25,000.00, on which there is no insurance. The plant and operations will be rebuilt and resumed as soon as possible.

The Pittsburg Granite Co., Pittsburg, has just completed the construction of the new mortuary building for the West Newton cemetery, at West Newton, Pa. The new structure is built of granite, and the cost was about \$6,000.00. The chapel and the office occupy the main floor, and in the vault, there are twenty-four crypts for caskets, while the brackets hold twelve, and the wings twenty. These crypts will be sold to the public. The new structure was started about a year ago, and is one of the finest in Westmoreland County.

William D. Solomon, a pioneer granite cutter of Allegheny, Pa., died on September 21, at Indianapolis, Ind., while superintending the construction of a mausoleum. From a granite cutter, he rose to the position of superintendent of construction for the Harrison Granite Co., of New York City. For many years he had been connected with Campbell & Horgan, of Pittsburg, and many of the finest vaults and mausoleums in the Pittsburg and Allegheny cemeteries were built under his supervision. He was 52 years of age, and was born in Allegheny. He is survived by his widow, one son and one daughter.

The city of Pittsburg proposes building a public drinking fountain in Schenley Park, at Snyder's Springs. The fountain will be a granite pile, gray in color, and ornamented with an Indian head in the center, which will be a likeness of Catahessa, a famous chief, who had a great deal to do with the early history of Pittsburg.

LOUISVILLE, KY.

LOUISVILLE, Ky., October 3.—While the season for all building operations is nearing the end, there is no cessation in the workings of the various cut stone yards which have all the appearance of a spring opening. This, too, with the increased use of concrete in all kinds and character of buildings.

John Diebold & Sons have a number of orders on their books, notably among which are: Lawrence County courthouse, at Ironton, Ohio, two stories and a tower, 60x130 ft., Bedford oolitic limestone throughout. The architects are Richards, McCarthy & Bulford, Columbus, Ohio; the new Elks Building at Jackson, Miss.; W. S. Hull, architect, Bedford stone entirely, and the Merchants and Farmers' Bank, at Okolona, Miss., quite an important building to be built of Bedford limestone. Messrs. Barber & Klutz, architects, Knoxville, Tenn.

In addition to a huge traveling crane for handling the stone, it is quite a sight to witness the work of the Putnam lathe, installed by the Putnam Lathe Co., Manchester, N. H., on which can be worked columns as large as 5 ft. 6 in. in diameter. Andy Diebold, of this concern, is in the East on business.

The Peter & Melcher Steam Stone Works, in addition to their many orders for granite, have just been awarded the contract for the granite for the new City Hall Annex, amounting to some \$10,000.00. They are extremely rushed in their monument department, and are at present at work upon handsome monuments for the late Ernest Norton, and the late C. G. Shryock, in addition to other local work.

Jos. H. Gernert is finishing up the last of his many local jobs. Granite is the material in demand for monuments, and during the entire season, Mr. Gernert has made only four pieces of work in which marble was required.

The Blatz-Krebs Stone Co. are rushed up to the handle with the finishing of interior marble work. All the jobs in hand are for local residences, and though small in individual size, yet the number means a large amount of marble used.

The shops of the James Clark Monument Co. present a very busy appearance. "No large jobs

of special importance or special design, but as busy as the rest of them," was the report when called upon.

The Muldoon Monument Co., while not exactly "resting upon their oars" are awaiting the result of bids just made on several important pieces of monumental work, with the expectation of having lots to do during the fall months.

Mr. Wetstein, of Jos. H. Peter & Co., is enjoying the era of prosperity in monumental lines. Their local trade is a sort of a fixture with them owing to their one way of doing business—the right way, and while they have nothing of great importance or prominence at this time, their force is continually busy, with the outlook good.

Peter & Burghard Stone Co. report business very favorable and the outlook very bright. They are expecting to secure several large contracts for public buildings to be erected in the East. Their cut stone department is quite busy, and they are working all their machinery over-time. Their new gangs, diamond saw, etc., are in full operation, and their new marble plant will be in complete operation by the 15th, which will enable them to handle any sized jobs that may come along.

On October 6, they will begin setting the granite work at the Lincoln Savings Bank Building, this city, and will follow this with the stone and marble which is already to be set.



California Volunteer Granite Bronze Group.

SAN FRANCISCO, CAL., September 25.—The splendid military group-statue dedicated to the memory of the California volunteers who actively participated in the Spano-American war in the Philippines, was very recently formally unveiled here. The ceremonies were of an impressive character, and were under the auspices of the Governor of California, the Mayor of San Francisco, the State National Guards, and the United States military authorities. The unveiling and dedication of this magnificent group was witnessed by a vast concourse of citizens.

The work was designed and modeled by Douglas Tilden, the well known California sculptor. The bronze casting was done in Chicago. The entire work has required nearly three years, though there has been some unavoidable delays.

The total cost of this group-statue approximates \$35,000.00, which sum was raised by voluntary contributions.

All the figures of the group—the officer, dying soldier, the Goddess of War, and the Winged Steed, are of bronze, and are over life size. They rest on a large pedestal of solid California granite. From the ground to the highest point of the group, is about 20 feet.

This statue has been placed at the intersection of Market Street and Van Ness Avenue—a very conspicuous location. It is the largest and most costly memorial statue of the kind on the Pacific Coast, and is considered Sculptor Tilden's masterpiece.

SAN FRANCISCO.

GREATER NEW YORK.

Boom in Skyscrapers—Demand for More Help.

There has been such a boom in the business of building skyscrapers in New York that the architects and contractors are shrieking aloud for foremen, clerks, mechanics, etc., and new classes are being formed in all the schools. More than \$50,000,000.00 is being expended on high ones below Fulton street alone.

New Laboratory for Nathan Straus.

Plans were filed for the new laboratory to be built for Nathan Straus, at 348 East Thirty-second Street, for the sterilizing of milk. The edifice is to be 35 feet front and 80 feet deep, with an ornamental facade of brick, trimmed with limestone. It is to be fitted with electrical machinery for the Pasteurizing of milk, and will have large storage tanks and elevators. There will also be quarters for physicians. The building will cost \$30,000.00. The architect is J. H. Duncan.

New Home for Washington Heights Firemen.

Plans were filed for a three-story station house for the new engine and hook and ladder companies to be established on 181st Street, east of Audubon Avenue, for the Washington Heights territory. The building is to be of brick trimmed with limestone and granite, and will have a frontage of 46 feet and a depth of 100 feet, and is to cost \$50,000.00. The city's architect is Howard Constable.

Perry-Mathews-Buskirk Co. report business as very quiet, due to the scarcity of money and a falling off in building operations, especially of a speculative character. There is a great deal of new work on the way, however, and as soon as it comes out, it will no doubt stimulate the market.

Architects Praise Stanford White.

The executive committees of the New York chapter of the American Institute of Architects, the Society of Beaux Arts Architects and the Architectural League of New York have passed a resolution expressing their sense of the great loss which the profession and the art of architecture have sustained in the death of Stanford White. The resolution says:

"His quick and generous appreciation of all that is beautiful, even beyond the field of its immediate profession, was so genuine that the influence of his work will long continue to be a stimulus to the artistic development of this country."

"Only those of us who have been closely associated with him professionally can fully appreciate the love and enthusiasm with which he devoted himself to art."

"His was a commanding personality, and whatever he produced had the touch of genius."

The Hall of Records in Queens—President Bermel and the Municipal Art Commission.

The Municipal Art Commission, by its refusal to approve the plans for various municipal works, has delayed the execution of hundreds of thousands of dollars' worth of city contracts, according to the officials interested. President Joseph Bermel, of the Borough of Queens, is indignant because the Art Commission will not pass his plans for the \$300,000.00 courthouse in Queens. The many disputes over the Hall of Records were supposed to have ended. They have broken out again, however, through the criticism by the Art Commission of the statuary to be put on the empty pedestals in front of the structure. The commission approved, but with conditions, the proposed mural decorations for the hall. The new shelter house for the tennis and croquet players in Prospect Park, Brooklyn, and a number of other shelters, fine houses and other public buildings have been approved by the Commission.

When asked why the Art Commission had refused to approve the plans of his architect, Pietro Coco, for the new Queens County courthouse, President Bermel said: "The design was actually too handsome. That is the whole reason. It was too beautiful."

The Commission's criticism of the new \$300,000.00 building, which it is proposed to erect on the site of the present ruins, the old courthouse having been almost totally destroyed by fire, is that it contains too many styles of architecture for one structure. The design in the Municipal Art Commission room in the city hall shows a building with a Greek facade of four columns and two pilasters.

There is a Greek pediment with allegorical sculptural work in relief. But on either side are two pillars with lamps, all four of the same design but of modern abstraction from a possible Renaissance original. The top of the edifice is a kind of pergola, but almost wholly of glass, which it was pointed out, was not in keeping with the Greek facade. There are in front of the Greek entrance two lions on pedestals. The Greek antheurion top of the edifice is said to be a modernized adaptation of the ancient architectural ornamentation.

Too much coloring is another criticism. There are in the design shown brown, white, red and green, while two flags of red, white and blue show at either end of the front.

Mr. Bermel said that the building is really a very handsome one, but what he objects to he said was that Mayor McClellan was overruled by the Art Commission in disapproving the plans.

"Mayor McClellan told me before he went to Europe," said President Bermel, "that the plans could go through without the approval of the Municipal Art Commission, and now the Art Commission takes it on itself to disapprove them. Of course, I went to see about it, I asked Acting Mayor McGowan how it was. It said it was through an oversight. He told me that the plan was put in with a number of others that were brought before him to sign, so that they could be sent to the Art Commission. He did not see that the plan for the Queens County building was among them, and he inadvertently signed it, thus formally bringing before the Commission for approval."

"Will you insist that the plan shall go through as it is?" President Bermel was asked.

"Of course," he said. "When Mayor McClellan comes back from Europe I shall see him about it. But I think we shall make a few changes any way. It certainly was too handsome for the commissioners. A man named Cook objected. Said the designs were too varied."

Walter Cook is the sculptor on the Art Commission. The architect Pietro Coco is a Queens resident. The Art Commission's criticism of the statuary for the empty pedestals in front of the Hall of Records, was that only one of a group was shown. There are to be three figures in each group. It is said to be of colossal size and to be allegorical. Incidents in the city's history, it was said, are the basis for them. One of the members of the Municipal Art Commission said yesterday that there was no fault found with the sculptor's taste, but that the Commission did not feel it wise to approve the design until all the figures had been seen. For similar reasons the Commission also refused to approve some mural decoration for the Hall of Records. These are to be mosaics, and only drawings exhibited instead of the completed decorations, Horgan & Slattery, the architects, were directed to show the entire mosaic as well as the groups of statuary, that they may be inspected by the Commission.

The new building for the Health Department in Brooklyn will be the first of a number of structures planned by the Art Commission to border the plaza at the terminus of the new Manhattan bridge. Bradford L. Gilbert is the architect of the new Health Department building. It will cost \$125,000.00. The Art Commission has approved the design of the statue of Verdi, the composer. For a number of years Italians of prominence in artistic and commercial life have wished to erect a statue of the composer in this city. The statue which has just been approved was the gift of a committee, headed by Charles Barsotti. It will be erected at Seventy-third Street and Broadway.

Six-ton Cornerstone Laid at Roosevelt.

A message from Roosevelt to Phoenix, Ariz., dated September 5, says that at 5:15 p. m., on September 4, Supervising Architect Hill laid the corner stone of the Roosevelt storage dam, an immense rock weighing six tons. This is the beginning of the real construction of the big government enterprise. The cornerstone is thirty-two feet below the normal river bed.

Brought the Cornerstone with Them.

Governor Warfield and staff and the members of the Maryland Commission to the Jamestown Exposition, took part in the ceremonies attending the laying of the corner stone of the Maryland building on September 19, to be erected at the exposition grounds. The Governor and party brought the corner stone with them.

Cornerstone of Chicago Courthouse Laid by Fairbanks.

The corner stone of Chicago's new county courthouse, which, when completed, will be the largest courthouse in the world, was laid on September 21, with elaborate ceremonies. Vice President Fairbanks was the orator of the day.

\$2,500,000 Loaned on Big Building Now Going Up.

The Equitable Life Assurance Society loaned \$2,500,000.00 to the Brunswyck Site Co., on the east side of Fifth Avenue block, from Twenty-sixth to Twenty-seventh Streets, 197.6x157.6, where a twelve-story brick, stone and steel loft and office building is under construction. James Gillies & Sons, of Long Island City, are the cut stone contractors. The loan is due January 1, 1911, with 4½ and 5½ per cent interest. Benjamin P. Cheney, of Boston, is president of the company, which was incorporated in 1905 with a capital of \$2,000,000. The building is to be completed in ten months.

Outing of the Employees of John Hynes at Glendale, L. I.

The employees of John Hynes, the well known Brooklyn granite dealer, at Union and Bond Sts., had their annual outing and games on Saturday, September 15, at Glendale, L. I. It was a most enjoyable affair. Mr. Hynes and a large number of his Brooklyn and Manhattan friends being present, every one had a good time, and it was voted a day well spent.

Away on a Business Trip.

Mr. J. L. Wegenaar, of the New England Granite Works, 498 Fifth Avenue, started Sunday night on a business trip up the State to be gone a week. He says they have had the biggest season ever so far this year.

Death of a Prominent Cut Stone Contractor.

Mr. David Brown, of Ninth Street and Gowanus Canal, Brooklyn, one of the best known cut stone contractors in Greater New York, died on September 12 last, and was buried on Saturday, 15th. The funeral was largely attended, a great many stone men being present.

Erecting a Large Monument at Cincinnati, Ohio.

Mr. Urlick, of the Harrison Granite Co., 44 East Twenty-third Street, states that they have a big job on hand at Cincinnati, Ohio, in the shape of a shaft monument of Barre granite for the Muhlenberg Estate, to be erected in Spring Grove cemetery. The base is 14 ft. square in one piece, requiring a special car to carry it, the shaft is 4 feet 6 inches square at the bottom and 45 feet long and weighs 80 tons. This is one of the largest monoliths quarried in some time.

They also have the contract for the Schiller Memorial, to be built in one of the public parks in Detroit of Barre granite pedestal and bronze statue, seated figure of the poet. The sculptor is H. N. Matson, of Cleveland, Ohio, and it will cost about \$10,000.00. Work on the McKinley Memorial at Canton, Ohio, is progressing nicely. They have all the re-inforced concrete construction completed. Both interior and exterior sides of mausoleum is carried up to base of dome and will begin work at once setting the granite for the steps and approaches. They are very busy and have all the work they can take care of for this fall and winter.

New Fifth Avenue Houses.

Several high grade dwellings will soon be under construction in the vicinity of Fifth Avenue between Eightieth Street and Carnegie Hill. In addition to the Warbury house at 13 and 15 East Eightieth, and the new dwelling for Gen. Loyd Bryce, at 1025 Fifth Avenue. A new residence is to be built for Mrs. William Pollak, on the north corner of Fifth Avenue and Eighty-eighth Street. It will be five stories high fronting 25 feet on the avenue and 77 feet on the street, and will cost \$80,000.00. The house will be of brick, trimmed with limestone in the colonial design, with a mansard roof and second-story balconied windows. There will be a central entrance on Eighty-eighth Street, with a marble vestibule and staircase hall. The architects are Hoppin, Koen & Huntington.

\$950,000.00 Apartments for Central Park West.

The Gotham Building and Construction Co. filed plans for its twelve-story apartments on Central Park West at the corner of Eighty-fifth street. Henry L. Felt is president. The house is to front 102.2 feet on the Park and 140 feet on the street. It will have facades of front brick, trimmed with Indiana limestone and terra cotta. It is to cost \$950,000.00, according to Architects Milliken & Moeller, who filed the plans.

New York Sculptor Honored.

Frederick E. Triebel, the New York sculptor, was recently elected an Academician of Merit of the Royal Academy of St. Luke, at Rome, the oldest academy of the fine arts in the world. The only other living American said to have been honored by election to this institution are Daniel C. French, Edwin Howland Blashfield and Charles F. McKim.

Masons to Erect Monument to McKinley.

The Free Masons of the United States have decided to assume charge of the movement to erect a monument to President William McKinley on his cemetery lot in Canton, Ohio, and with a purpose for quick action in raising funds have started an endless chain. The amount to be subscribed by each link is two cents, which is to be forwarded to Judge William R. Day at Canton, who is at the head of the enterprise. Craftsmen are requested not to break the chain under any circumstances. We have in America about 1,000,000 Masons, and if each should contribute two cents the monument fund would reach \$20,000.00.

Municipal Art Commission Approves "Evolution" Models.

The Municipal Art Commission, Robert W. de Forest presiding, approved the designs of Philip Martiny for two granite groups flanking the Chambers St. entrance of the Hall of Records, representing "The Evolution of New York." The designs for ceiling mosaics in glass by William L. Dodge for the Hall of Records, and wood carvings by W. Zinn, representing Roman and Grecian Law, for the Judges' room of the Hall of Records.

The Commission approved the masonry and steel approach to the Blackwell's Island Bridge, on the Long Island side.

Designs were also approved for three fire station houses in Brooklyn, at Union street, 11th street and Ralph avenue, respectively, and for additional buildings at the Ridgewood pumping stations.

The Commission disapproved a design for drinking fountains for men, horses and dogs in Macomb's Dam Park.

Visiting New York on Business and Pleasure.

Samuel Miller and H. H. Lapist, president and vice-president of the Miller-Kopp Cast Stone Co., of Washington, D. C., were in New York recently on business and found time to call on their friends in the stone business here.

Enlarging and Fitting Up His Offices During the Lull.

Michael Cohen, of 1123 Broadway, states that business is very quiet in the city at present, but he seems to think it will be only temporary as there is a lot of big work in prospect. There is an enormous amount of stone on hand in and near New York, so that there will be no delay in supplying the demand when business picks up. The railroads have raised their rates for unloading stone, making an increase of from three to four dollars on each car.

Mr. Cohen is secretary and city representative of the Bennington Marble Co., of Dorset, Vt., he says they are finding a waiting market for all they can turn out. They have been delayed some what by a shortage of water at their quarry, there being no rain recently, but in order to guard against that in the future they are putting in a pipe line to bring the water from a creek some distance away.

In order to handle the various specialties in connection with his stone business and give each line proper attention, Mr. Cohen found that he required more room and more help, he has just leased two large double offices across the hall from his private office. Miss Gray has been promoted to the position of head bookkeeper and he has taken on two more stenographers and another office man. After he has his suite of offices fitted up and his business in such shape that he can get away for a few days, he is contemplating a trip to the southwest on business and pleasure, being unable to take a vacation this summer.

Two Great Modern Stone Plants Nearing Completion.

There are several large and well equipped stone plants around New York, but I doubt if there is any in the country to compare with the new plant now in course of construction for William Bradley

& Son at Ravenswood, L. I. This plant is just across the East river from the most thickly populated section of Manhattan and near the Long Island approach to the new bridge now in course of construction.

Another new stone plant a short distance away and which is also nearing completion is that of Edwin Shuttleworth & Co. In a few more weeks these plants will be in full operation and no doubt will do much to boom that section in which they are located and which has been so long neglected, in fact it is said that in a few more years that side of the East river will vie with the opposite shore in business activity. So much for the stone industry.

H. L. Brown, of 5 East 42d street left town on Monday last on a business trip, he will be gone ten days.

Mr. A. B. Parker, of the South Dover Marble Co., 7 East 42d street, is out of town on business. He is not expected back at his office before Friday next.

Mr. A. Wells and W. A. Kirtland, the well known slate dealers at 1123 Broadway, say that there is nothing particularly interesting to say only that business is going along about the same as last month.

Messrs. Leland & Hall say that they have no report to make further than that they are quite busy, principally all small work of a high grade. They are also selling large quantities of Meyers German cement.

A \$45,000,000 Tunnel from Jersey to Brooklyn.

The Union Terminal Co. expects to apply to the Board of Estimate for a franchise to construct a tunnel under the Hudson and across Manhattan in the vicinity of Fourteenth Street, and then under the East River, to handle passengers of the Lackawanna, Erie and other railroads terminating at Jersey City and Hoboken, which have no tunnel facilities. The entire cost of the work, it is estimated, will be about \$45,000,000.00, of which about \$15,000,000.00 is already subscribed. Henry S. Wood, a contractor of 8 East Thirty-second St., said the plans called for a six-track tunnel under each river. A union passenger station is to be constructed under Union Square, and it is proposed to construct a branch subway through Broadway, under Madison Square, through Madison Avenue to the Grand Central Station, and possibly a spur through West Thirty-second St. to the Pennsylvania terminal.

A new lot of Phipps Model Houses in New York.

Plans were filed on the 29th of September for a new group of four model tenements to be built for the Phipps Houses Corporation on the north side of Sixty-third Street, east of West End Avenue. They are to be six-story edifices, each with a frontage of 50 feet and a depth of 87.5 feet. They are to be six story edifices, each with a frontage of 50 feet and a depth of 87.5 feet. They will have accommodations for seven families on each of the upper floors, and from four to six families in the first story. The cellars will be fitted with play rooms for children. There is also to be a kindergarten on the first floor. There are to be large central open courts and the facades are to be faced brick trimmed with terra cotta. The buildings are to cost \$70,000.00 each, a total of \$280,000.00. The architects are Whitfield and King.

Plenty of Granite.

CLEVELAND, OHIO, September 17.—The report of the Cuyahoga County building commission during its investigations from August 25 to September 9, visited fourteen different granite quarries in various sections of the country, which necessitated traveling 3,747 miles. All the quarries visited had plenty of granite in sight; several were not fully opened and others which were well developed, had inadequate facilities for quarrying and shipping.

The committee adopted a resolution which provides that bidders under consideration be requested to furnish the commission with a chemical analysis of marble for the interior work, and for all granite and stone for the exterior work. And that they give the name of the firm and quarry whose marble they propose to use in the event of being awarded the contract.

Marble

Greek Marble.

ACTIVE QUARRYING BY ENGLISH COMPANY.

A report from Consul George Horton, at Athens, indicates reviving interest in the ancient marble quarries of Greece.

Among colored Greek marbles of great beauty may be mentioned those of the island of Skyros; the green marbles of Tinos; the Cipolino marbles of Euboea, the two shades of green that blend in broad, wavy lines that run through the stone; and the red marbles of Mani, known as Rosso Antico. The latter is of a blood-red color, often traversed by veins of white, or sometimes found in solid red.

A British company owns the whole of the white and blue quarries on the Penteli Mountain range and have spent money lavishly in developing them. The private railway of the company extends 15 miles from the inclined plain of Mount Pentelcus. Blocks weighing 20 tons are taken to the company's fashioning works, whence they are conveyed to the Athens railway, a distance of about eight miles, also over a private line owned by the company. Work at the Penteli quarries is kept in full swing day and night and about 1,000 men are on the pay roll. It is the aim of the company to place marble on the market at less prohibitive prices than those which have prevailed hitherto. Blocks weighing as high as forty tons have been taken down to the port at Piraeus and loaded on shipboard for export. The Penteli marble is almost pure carbonate of lime, but there is more sparkle in the crystals than is found in Italian marble. Its close texture and high purity of color have given it an undeniable claim to its description as a "white" marble.

But of all the white marbles of the world perhaps the most beautiful is the finely grained and spotlessly pure Parian marble of the island of Paros. The celebrated statues Venus de Milo, the Venus de Medici, the Venus Capitoline, were made of this marble. These quarries, as well as those of the adjoining island of Naxos, have been taken over by this same English company.

Talking to Railroad Commission.

Pres. J. B. Roberts, of Ball Ground, Ga., of the Georgia Marble Retail Dealers' Association, and H. T. Parker, of the Dallas, Ga., Marble Co., have been having a tilt with the Railroad Commission, their contention being that the Georgia rates should be lower, in order to compete with the Vermont and Tennessee marble. The Commission, however, seem to be from Missouri, or some other place, and these gentlemen are having a time of their own. Georgia marble, however, is getting to be a large factor, and if the manufacturers of this material get to pushing, as they know how to push, something will have to break loose and it will probably be the commission, and the rates will have to change to meet their requirements.

Not After Business.

You will notice a comment in the quarry column about the promotion of quarry products. An illustration of this is before us in a statement that the reason the East Tennessee marble will not be used in the Shelby County courthouse at Memphis was because the Knoxville people declined to put in a bid. It is true that the East Tennessee marble men have had a busy year, in fact, even after increasing their production they had all the business they could take care of, but it is very unfortunate that an important point like Memphis is not represented in her courthouse by marble from the home State, especially as it makes a good talking point for the man having something to sell to say that they used it in his own bailiwick, but you know the old saying, "A prophet is not without honor, save in his own country."

The Frederick F. Steinbach Marble Co., of Brooklyn, N. Y., has been incorporated with a capital stock of \$10,000.00. F. F. Steinbach, Marie E. MacCarmac, Jesse W. Uppercut, of Brooklyn, are the incorporators.

San Francisco Marble Situation.

The Vermont Marble Co., which lost its Pacific Coast branch plant and a large stock of Eastern and Italian marble, at 244 Brannan Street, in the big fire, is having a larger three-story building erected at the old site. The new frame structure, which is of mill construction, with concrete foundations, will cost \$38,000.00. F. H. Massow is the contractor. The machinery and other equipment will cost considerably more. The new plant which will be driven by a 250 h. p. Nordberg automatic engine, will include four rubbing beds and four gangs, besides the regular outfit of molding machinery, etc. Most of the machinery has been ordered in Rutland, Vermont. A derrick with an 80 ft. mast has been ordered for the yard from the American Hoist and Derrick Co. It is equipped with all the latest devices for conveniently handling marble of all sizes. It may take until December next to complete the machinery plant. A good sized stock of marble has been accumulated at the yard and more foreign marble is coming by sea. The country trade, much of which is handled direct from the quarry, has been taken care of ever since the fire and the company's travelers have been on the road as usual. The San Francisco branch has imported over 1,000 tons of Italian marble in two ships which started before the fire. One of the ships has just arrived after being six months on the way. The ship Speme is out about 297 days from Genoa with 1,000 tons of marble, having been forced to lay up three months at Montevideo on account of the cargo shifting and other damage. The management of the Vermont Marble Co. reports a good market for marble with prospects of a great increase in the demand as building construction in San Francisco increases. Monumental work is in fair demand. A great deal of work has been done since the earthquake in the way of repairing and replacing monuments that were broken or thrown down.

Mr. Baxter, a Los Angeles capitalist, is starting a new marble quarry near Columbia, Tuolumne County, Cal., where the hills are made of valuable marble. The deposits are said to be even superior to those of the California Marble and Construction Co., which has been opening a quarry in the same district. The Columbia Marble Co. has been taking out marble of fine quality at Columbia for a good many years past.

Stone and marble dealers already realize that they will have to meet changed conditions in the rebuilding of San Francisco, but they think there will still be a market for all the material they can take out with the machinery and labor available. The new building laws, which recognize reinforced concrete construction for the first time for the superstructures of buildings, have resulted in the planning of many large reinforced concrete buildings for which stone fronts would have been specified before the fire. The amount of marble finish has been cut down also in some of the new buildings about to be erected. The amount of crushed rock and cement for concrete will be proportionately increased, however. There will be more or less marble finish in all of the new reinforced concrete structures.

The Columbia Marble Co., which lost its stone yard, machinery and stock of marble at 343 Brannan Street in the big fire, is the first marble concern to resume business with a complete machinery plant. The machinery has just been started at their large new yard at Seventeenth and Missouri Streets, where they will have spur tracks connecting with three competing railroads. A large stock of Columbia marble of both the white and blue varieties, is already on hand and the company is ready for the expected rush of business. The equipment at the new yard includes three rubbing beds, three buffers, a diamond saw and the usual auxiliary machinery and air compressors. Pneumatic hoists are used for loading and unloading marble at the yard. W. D. Barnister, who owns a large interest in the company and acts as quarry manager, recently arrived from Columbia, where he reported a good deal of work in progress at the quarry. The company uses electric power generated by its own water power plant to operate the quarrying machinery.

Ruffino and Bianchi and Musto & Sons, whose large marble yards were destroyed by the fire of April 18, are preparing to resume operations in new plants in the North Beach district of the city.

Certain capitalists are contemplating the opening of marble quarry at Logan, Utah, and have ordered machinery for developing the deposits. Some of the local marble dealers are skeptical as

to the commercial value of the marble, judging from the samples so far shown here.

The California Marble Construction Co. is working a small force of men at its new quarry of fine white marble near Columbia, Cal.

The imports of Carrara marble from Italy for 1905 were something like \$995,851.00, an increase of 7 per cent over 1904. With the architect turning his eyes towards marble for interior decoration, notwithstanding the new quarries being opened and the possibilities of the American quarry, Italian marble imports are liable to increase.

The Hoosic Valley Lime and Marble Co., of Adams, Mass., are endeavoring to increase their operations and have recently had a track put in for receiving materials.

The Virginia Marble Co., operating in black marble near Harrisburg, Va., have added considerable new machinery and made an investment like \$25,000.00 to improve their facilities and plan to increase the volume of their business in black marble.

The Vermont Marble Co. are still enlarging their operations at Danby and Proctor. Their business is growing each year and it is certainly a sight to look over their big quarries.

The Carthage Marble and Stone Co., of Carthage, Mo., incorporated on the 14th of September, with a capital of \$60,000.00. N. F. Wright, E. Powers, K. H. Wright, N. W. Powers, of Carthage, and R. W. Briggs, of Taylor, Texas, are the incorporators. The company will open a new quarry north of town and will add to the district which is furnishing the Western country a high grade marble.

There is quite a little interest in the State of Wisconsin over the Commission's findings as to the materials to be used for the exterior of the new capitol at Madison. The architect, George B. Post, of New York, has shown a preference for Georgia marble. The Commission had a session last month and the contending materials seem to be Bedford stone and Wisconsin granite. The Commission have been very much impressed by the Minnesota State capitol which has an exterior of white marble, and it is a good strong fight between oolitic limestone and marble and Wisconsin white granite. Bedford stone seems to have the best of the price, and the materials, no matter which is chosen, will certainly be a credit to the State of Wisconsin, but the commissioners certainly have a hard job on their hands.

The contractor for the new postoffice at Lincoln, Neb., for interior work has been somewhat delayed owing to shipments of material. Orders will sometimes get mixed up and it happens that the stairways and wainscoting at this new postoffice will, when completed, fully repay the people of Lincoln for the waiting, but that does not help out the contractor, for he is in hot water trying to keep his men in material.

Auburn, N. Y., has a new firm known as the Marble and Tile Mosaic Co. E. D. McCarthy and A. F. Daniel are the members of this firm and they expect to conduct a business of manufacturing and laying tile and marble.

The marble workers of McDonald & Co.'s works, of Cincinnati have been on a strike demanding a nine hour day. It ended last week and some of the old men have come back at the old terms.

A matter of interest to marble men at this time is the proposed letting of contracts for the interior finish for the new courthouse building in Cleveland. According to the plans, over 50,000 feet of domestic marble is to be used in the interior. The plans, as they now appear, will call for about \$500,000.00 worth of marble for the interior of the building and the probabilities are that this coterie of buildings in Cleveland will take considerably more.

Doin' Things.

BANCROFT, ONT., September 22.—John D. Sergeant, superintendent of Central Ontario Granite and Marble Co., says: "We are taking steps to develop our quarry. We will build our mill at once for finishing marble. We have received the iron for two derricks of thirty-ton capacity, made by Smith, Whitcomb & Cook Co., of Barre. We have a Lambert hoisting engine, Rand steam drill, Sullivan channeller and we have just completed a mile and a half spur from the main line of the C. O. railroad into our marble quarry. We are making good progress and hope soon to have our equipment in place."

Slate.

The Production of Slate.

In 1905, as stated in last month's paper, the production of slate amounted to \$5,496,207.00. It was produced in the following states:

Arkansas	\$10,000.00
California	40,000.00
Georgia	7,500.00
Maine	224,254.00
Maryland	151,215.00
New Jersey	5,360.00
New York	66,646.00
Pennsylvania	3,491,905.00
Vermont	1,252,541.00
Virginia	146,786.00

These figures were compiled by Edwin C. Eckel, of the U. S. Geological Survey. Pennsylvania being the largest producer, by counties, the figures show that—

York County produced	\$94,207.00
Lehigh County	946,938.00
Northampton	2,450,760.00

Practical Hints for Quarrymen.

The only slate region which has been geologically mapped is the western Vermont and eastern New York slate belt. Maps of quarries of this region are included in Bulletin No. 275 of the United States Geological Survey, which is a recent report by Mr. T. Nelson Dale on the slate deposits and slate industry of the United States.

These quarry maps are designed to be of practical utility. The coloring shows where the Cambrian green and purple and the Ordovician red slates may be looked for or not looked for. The course of bedding and cleavage has been shown at several quarries by special symbols. The scale of the maps is sufficiently large to admit the entry of many more quarries and symbols. By using a small geological compass to determine the strike of any bed of good slate at any of the located quarries, and transferring it to the quarry map by means of a protractor, the probable direction of the recurrence of the bed can be ascertained and so with joints, hogbacks, or dikes. Such a compass should be provided with sights, spirit levels, and movable ring to set off magnetic variation, and have a clinometer attachment to indicate angle or dip.

Quarrymen are very skilled in detecting the presence of good slate from the peculiar appearance of the weathered edge surface. That skill appears to have been their only guide in prospecting in this region. Mr. Dale suggests that it would be well if it were reinforced by the use of a certain method in exploration, which he outlines.

This bulletin, which should be of practical value to every quarryman in the country, is published for general distribution. It may be obtained, free of charge, by anyone who makes application for it.

Orders Plentiful.

BOSTON, MASS., October 4.—E. A. Bullard, for many years manager of the American Slate Co., of Boston, has now established himself individually with office at 131 State Street, room 612, and reports an abundance of orders. He has connections with Maine, Vermont and New York and Pennsylvania quarries, and is in position to make right prices on anything in slate. Mr. Bullard is just getting his Brownsville, Me., quarry into commission and another season will have an abundant output from them.

The Fair Haven Marble and Marbleized Slate Co. is having extensive repairs made to its plant. A new up-to-date water wheel is being installed, and a wire-rope transmission. The work is under the supervision of L. B. Dow, of Boston.

The Union Slate Co., of Northfield, Vt., uncovered a large vein recently, of excellent quality. They are located at Northfield.

Stone.

The National Cut Stone Contractors' Association.

Meets Semi-Annually.

Robert E. Harrsch, Chicago, Ill. President
P. B. Parker, New York City. First Vice President
George Dugan, Bedford, Ind. Second Vice President
Henry Struble, Chicago, Ill. Secretary-Treasurer

Official Organ, ROCK PRODUCTS.

Modern in Every Detail.

Albert Weiblen, one of the best known marble men in the South, has lately moved into a new factory and office, that is located at the intersection of the New Orleans Terminal Co.'s railway and the City Park entrance. Formerly the show rooms and office were on Baronne Street, and the factory at the intersection of the Illinois Central railroad and Claiborne Avenue. The new arrangement was necessary because of his increased business which made more room necessary. The main building is 125x345 ft., with an office facing the City Park entrance. The work had to be carried on while the moving was being done, retarding the progress to some extent. All the machinery is not placed yet, but it is being put in as fast as possible. To a layman it appears to be a very complete plant and one that is up-to-date in every particular. It has a 200 h. p. Corliss engine and two 125 h. p. boilers fitted with oil burners that saves tons of ashes and cinders and dirt. There is a large Sullivan air compressor, dynamo, a fifteen ton electric crane running through the entire length of the main building, and over an additional tramway 85 feet in length. The heavy stone even to the weight of twenty tons is lifted from the cars on which it is shipped in and deposited in the factory where wanted. There are six saw gangs, three rubbing beds and two marble and two granite polishers, a Riehle moulding machine, a stone planer, a circular saw, granite surfacing machine and thirty pneumatic hammers. All the heavy machinery is placed on large foundations of concrete. The mill has just started and has the capacity of turning out a vast quantity of work. The building is high, airy, well ventilated and well lighted. The electric power and lights are furnished by their own plant.

The office end of the building contains the general office reception room, private office and a large room up stairs for the draughtsmen, all lighted by electricity. The Canal belt and the Esplanade street cars stop at the door. The location of the plant is an ideal one, as it looks out on the City Park, one of the most beautiful as well as historic parks in the city.

The building was erected by J. A. Coleman, of Bedford, Ind., and the greater part of the machinery was furnished by the New Albany Manufacturing Co., of New Albany, Ind., all of which are giving the best of satisfaction.

This firm has just completed the marble front of the New Orleans Stock Exchange, one of the most artistic pieces of work in the city. Several very large contracts are on hand, also for the interior marble of several of the new buildings now going up. Among the buildings are the Denechaud Hotel, the Elks' Home and the Turo infirmary.

Had a Busy Year.

CHATTANOOGA, TENN., September 18.—The Chickamauga Quarry and Construction Co., whose general office is in the Chamberlain Building, are operators of quarries at Chickamauga Station, on the W. and A. Railroad. They furnish all kinds of building stone, crushed stone, screenings and dust. Mr. W. S. Holmes, the treasurer of the company, say that the past season has been one of the busiest in the history of the company.

Busy All Season.

NASHVILLE, TENN., October 1.—The Foster & Herbert Cut Stone Co. report a phenomenal season in the cut stone business. They have recently finished the cut stone work on the Stalman Building, a twelve story structure which is constructed of stone up to the third story. They are already figuring on an annex to this building which will probably be built in the spring.

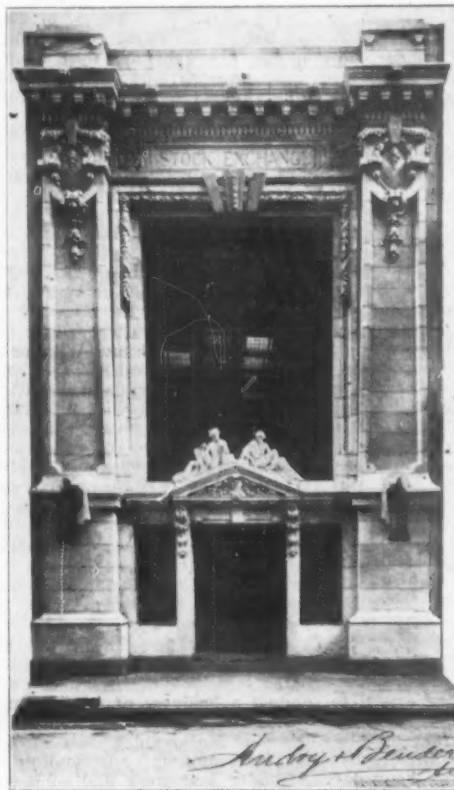
The Foster & Herbert Cut Stone Co. are also busy in their monumental department and have some orders for big jobs on hand to be erected this fall.

Decision for Defendant.

MAETINEZ, CAL., September 22.—The suite of the E. B. & A. L. Stone Co. against the Richmond Belt Railway, filed July 15, 1904, and involving \$38,690.03, was brought to an end, when Superior Judge Wells rendered a decision against the plaintiff.

Trebling Former Capacity.

BLUE SPRINGS, NEB., September 20.—The stone firm of Davis & Mayne will at once start to rebuild their stone crusher plant. While the exact size of the plant has not been determined upon, they expect to treble the capacity of the one burned.



A NEW ORLEANS MARBLE FRONT.

Henry Struble Cut Stone Co. has been organized at Bedford, Ind. The directors are Henry Struble, John Maurer and Otto Hunsch.

The Broken Dollar Stone Co. has been organized at Norman Okla., with a capital of \$2,500.00. The incorporators are William Morgan, Jr., S. K. McCall and E. B. McCall.

Lazzari & Barten Co., has been organized at New York, with a capital of \$100,000.00 to handle stone. The directors are J. B. Lazzari, H. M. Barton, L. M. Perry, Woodlawn, N. Y.

Genesee Stone Co., Milwaukee, Wis., have filed an amendment by J. E. Lee, president, and J. M. Clark, secretary, changing the name to Wisconsin Basic Manufacturing and Development Co., and increasing the board of directors from five to seven members.

Wicks Stone Co., of Monroe County, has been organized at Indianapolis, Ind., with a capital stock of \$100,000.00. The directors are: W. M. Wicks, D. K. Miers, C. E. Parkhill, Louis M. Riley, J. A. Gates, L. T. Dickason and N. E. Mathers.

Profits Too Small.

PEORIA, ILL., September 25.—Peoria Stone and Marble Works say: "Our business during the season about to close has been eminently satisfactory, at least, as to volume. About the profits we can say more definitely later on, say, about January 1, 1907. So far we have been able to meet all current expenses and discount all purchases during our twenty-eight years in operating a marble and cut stone plant. We never realized a profit that, in our judgment, could be deemed a reasonable compensation for experience required, time spent and money invested. We have made some few additions to our plant the past seasons in way of machinery and other facilities, and have been able to execute and deliver orders with reasonable promptness. We have made no particular efforts to add any new varieties of stone or marble to our usual standard varieties and qualities. In our judgment, Bedford stone as well as Ohio sandstone have not been displaced by either granite or other stone or substitutes for stone, and we are quite sure the volume of sales of limestone and sandstone during 1906 will equal, if not surpass, any former season.

We have encountered but few labor troubles during the past season in conducting our business and such as have come to us and to our notice did not originate on account of dissatisfaction in wages or hours on part of labor. Most of the trouble has been caused by some over-zealous or self-appointed walking delegate who wished to make a display of authority, however the unselfish firm and thoroughly organized employers of labor in the various lines of trade and manufacture have been the means of holding organized labor within reasonable bounds in any of its frequent demands. A scarcity of skilled workmen has in many instances caused an advance in wages and has compelled employers to accede to demands that were oppressive to the employer at the time. This trouble is largely remedied by employers who contend for and enforce their right to encourage and give opportunities to young men who are anxious to learn a trade. We shall continue to look forward for prosperity unless there are decided advances in raw material or a threatened change in the political situation of our country, and we do not look for either of these things to occur."

What Material Shall Be Used.

It is very amusing, and sometimes exciting, for the committees selecting materials for public buildings and this is especially true in a group of buildings proposed for the city of Cleveland. They have right in their back yard a number of the greatest sandstone quarries in the world and yet it is a fight whether their postoffice and other city buildings shall be of granite or something else. An article in a daily paper recently exemplifies their knowledge on the question, when in an interview with two or three commissioners it is said each went on to show they had picked some flaws in some sandstone buildings and also that the rain or some other kind of a cloudburst had taken a chip off of a granite building. We hope the best man will win, but the people of Cleveland will be convinced that they won't make any mistake if they use either granite or Bedford stone or sandstone for they are all grand materials, and with all those furnaces blowing out their soot, thanks to the enterprising Cleveland business men, any of the materials used will sooner or later accumulate color, but with air blast cleaners what is the difference? If sandstone was advertised in Rock Products there is no doubt it would be used, because it would perhaps be economy, owing to the close proximity of the quarries, but, alas! some of our quarry friends will not promote their business. The matter is getting so warm that ward meetings are being held and the Twenty-fourth ward petitioned that sandstone be used.

New Portland Company.

PORTLAND, ORE., September 24.—The Phoenix Stone Co. has just been incorporated by J. C. Veazie, R. A. Eva and D. W. Riedel, all of Portland. The concern is capitalized at \$100,000.00 and its business will include the purchase and operation of mines and quarries, and dealing in building material generally. The company will have its main office in Portland.

Progress of Cut Stone Industry.

The remarkable growth of masonry construction in this country and the consequent increase of business for the cut stone contractor was made possible by the introduction of the steel cage system which provided for light veneer walls of stone not intended for carrying any considerable portion of the weight of the building. It is safe to say that they would certainly have been practically no stone faced building in this country up to the present time if the masonry work had been designed upon the old idea of having the stone wall carry its own weight as well as the load of the building.

The modern idea of veneered walls only uses a small fraction of the quarry product that was considered indispensable by the old time mason, and this cheapens the operation to such an extent that cut stone can be specified in many instances where it would be entirely out of the question under the old regime.

The introduction of modern equipment, both at the quarry and in the stone cutting establishment have reduced the cost again by the measure of long division, for one or two men operating the stone planer will turn out as many running feet of any moulding course as twenty men could turn out in a week working by hand with bevel and templet, and the work so turned out by machinery is really far superior to any that has ever been produced by hand labor for the reason that its uniformity is a practical mathematical operation.

The recent application of the pneumatic carving hammer has cheapened the production of such intricate details as constitute the Renaissance and Byzantine styles, both in frieze, in crown, in cap, and even in sculptuary of the highest type. Models can now be followed at figures of cost within the bounds of reason that were long ago abandoned and fell into disuse because it had been found in practice that the revenues of an empire were insufficient to meet the cost, even when a very large amount of the manual labor was done by slaves and merely receiving the finishing touches, as it were, from the hands of ultra skilled artists.

The new awakening of the study of architecture made possible by these economies clearly indicates not only a resumption of the most elaborate decorative features in cut stone which is already finding expression in numerous modern examples, but beyond this it suggests that a new order especially adaptable to the modern office building or mammoth department store, will be developed and completed. It will not be limited as to profusion of details, nor bounded by the old ideas of cost, for with the unprecedented growth in the wealth of this country as we realize upon the limitless resources and concentrate the proceeds into the cities, there will be no lack of the all essential feature to every stone cutting proposition.

This is the time that we can profitably study the best examples of the highest attainments that were accomplished under the long abandoned ideas, but the time is not far distant when the cities of America will contain in profusion examples of exquisite architectural effects, such as the world has never yet seen in a comparable assemblage. The modern architect who is up with the times studies the old, not for the sake of making a copy, but to be sure that no line of merit nor effective combination shall be left unconsidered in the new idea that he is producing which is to be the crown of all architectural efforts.

It is up to the cut stone contractor, who wants to be fully abreast of the times, and who means to lead the procession, to use the new tools and equipment that are already doing so much for his craft and learn the utmost limit by practice as to what can be accomplished with them, for this will suggest further improvements in this same line, if indeed they have not already reached perfection. This study must be conducted with reference to many different kinds of stone as well as combinations of several in the same detail, for the veneering principle of cut stone veneering is fast becoming quite as popular for interior work as it has already become the established thing for outside elevations.

Of course every workman as well as every contractor will naturally have his own favorite kind of stone to work upon, and he would invariably, if left to his selection, erect all buildings from his favorite stone. This will never be, for the investor first, and after him the advisory designer, will always have the final selection of the material.

The equipment now at the command of the cut stone contractor have really little bearing upon any special kind of stone that is to be worked, and outside of the personal equation of the workman, the contractor is already really in a position to use any kind of quarry product that the specifications may call for, and in many cases this has already been a practice with the leading cut stone contractors.

Are Stones Elastic?

It is said that elasticity is a property common to all bodies. It has been frequently noticed in the granites, and among other things the phenomena of dilation has been observed, when they have been taken from the quarries where they have been subjected to various high pressures. Can it, however, be concluded that from this all stones are elastic or have bending properties? By far the greater part of the noted geologists are silent upon this point, says the Stone Trades Journal. However, Sir Archibald Geikie maintains that slabs of marble, when they are exposed to the air become distorted, or curved, after a number of years, varying according to the kind of marble. This celebrated English scientist attributes the deformation of the marble to atmospheric action. Professional stone workers, who have often occasion to notice these instances of curvature in the stone, attribute it equally to the influence of the rain and sun. Their assertions are certainly justified by appearances, but, however, would not the general term—elasticity—give a satisfactory explanation to the phenomena? Dampness is the principal cause of decay, although, of course, in cities, the atmosphere of which is surcharged with various acids—sulphuric, carbonic, etc.—the chemical action is also a powerful factor. In order to accomplish its work, the wet must saturate the stone—that is, it must completely impregnate the matter. Without doubt the existence of it can be noticed in all stones, although all traces of wet may have long disappeared.

By increasing the number of observations, one is thoroughly convinced that the atmospheric influences have but a small part in the cause of the deformation of marble, or, as a matter of fact, any of the other varieties of stone.

Take for example, tomb stones placed horizontally, or in a slightly inclined position, they settle now and then in the center. The most curious phenomena, however, is that which is most frequently observed in the thin inscription slabs fixed vertically by their corners upon the monuments. Many of them will curve considerably, and present an inclination of many centimetres, although they seem, on first sight, to be in place; from this, therefore, it might be said that there has been a considerable elongation in the stone.

If moisture and the sun were the sole causes of this deformation, the slabs would curve in different directions according to the manner in which they were influenced by the action of the rain and the sun; the one always producing the phenomena of dilatation, and the second that of contraction. We would, therefore, seek another explanation of the phenomena. It is, that elasticity plays a role, and that alone will give an answer to the enigma.

The marbles employed have been cut and brought from quarries where they have been subjected for centuries to immense pressures. Once freed from these pressures, the stones gradually dilate, until eventually after many years the grains from which the rock has been formed, have assumed their normal position. The phenomena is in all points similar to that which has been observed in the granites, although, in this latter case, the action is much slower. From this it may be concluded that all stones are elastic up to a certain point.

In the cemetery at Montparnasse, there is a tomb stone fixed vertically upon a pedestal, and actually quite deformed. It is a white stone taken from the Paris bed, 1m. 30c. m. (or about 4½ feet) in height, and has an inclination of 10c. m. (about 4 inches). According to the inscription upon it, parts of which are still readable, this stone was erected in 1848. We should be happy to show that in this case elasticity alone was the cause; unfortunately, however, the effects of the atmosphere are too much in evidence.

The stone is placed in a position East by West; that is to say, the face is to the south and the back to the North. The rain has thoroughly impregnated the soft substance, penetrating into all the pores, and has in this way produced upon the Northern side a dilatation, whilst upon the Southern side the sun has produced a contrary effect, contracting the molecules after the evaporation

of the water. On account therefore of this double action the stone has curved towards the South. On the other hand, the rain and the sun have left their marks; upon the Northern side the stone is very soft, whilst on the South it has hardened considerably.

The white Paris stone has a peculiar cleavage plan which the workmen should have followed in the cutting; but this stone is not at all hard to the chisel, and, in order to avoid failures and waste, the most economical system of cutting is generally followed.

It has been supposed that, perhaps accidentally, the stone in question had been cut against the natural run of the strata.

If this elasticity, thus partially demonstrated, is common to all stones, as we are permitted to suppose, we might, with some geologists, attribute earthquakes to the same phenomena, when, by means of some unknown cause, the forces concentrated under our feet, dilate, and that the sun, drying out certain parts of the terrestrial crust subject to dilatation caused by the subterranean waters, thus liberates the rocks which have been imprisoned for ages, under a colossal dynamic force.

The many friends of Mr. Hugh Story and his estimable wife, will regret, with the editor of Rock Products that they did not all have the pleasure of joining in the celebration of the twenty-fifth anniversary of their marriage which took place at Vogelsongs, in Chicago. If you know Hugh Story and the Mrs., you will be satisfied when they start to make life pleasant for you, that you are bound to enjoy every minute of an occasion of their hospitality. No one would think that Mr. Story had been married that long or had lived forty years except for the fact that he has some white strands mixed up in his hair and has the appearance of old age. This isn't true, however.

A contract for the municipal building for Oneonta N. Y., has been let on the plans of Architect Kinney, of Utica. Charles C. Ingalls, of the Ingalls Stone Co., at Binghamton, N. Y., secured the contract for \$59,575.00. The bids were for the complete building.

Albert Weber, of Elliott, Md., sold his granite quarries and thirty acres of land attached to the Patapasco Quarry Co., composed of Baltimore capitalists for \$50,000.00. The quarries are located on the Baltimore & Ohio railroad in Howard county.

A new company has been incorporated at Amory, Miss., known as the Alabama Lithograph Stone Manufacturing Co., with general offices at this point. The officers are H. B. Aden, president; J. M. May, vice-president; E. D. Gilmore, treasurer, and Charles L. Tubbs, secretary, all of Amory. The capital stock is \$100,000. This property lies on the Alabama Western railroad near New Burleson.

An Allis-Chalmers Regrinding Tube Mill in Cyanide Practice with the Moore Filter.

Based on the results obtained from the operation of an experimental plant of half a ton capacity at Bodie, California the Standard Mine designed a plant to which all the tailing from the Standard Mill might be applied in accordance with the Moore methods of treatment. The new plant, which was placed in regular operation in 1905, has fulfilled the expectations of those who were responsible for its design.

The ore at Bodie consists of quartz, iron oxides and clay. The gold is partly coarse and partly very fine, which amalgamates badly. The ore is difficult to treat in spite of the absence of all minerals ordinarily classed as deleterious.

An Allis-Chalmers 5x22 ft. tube mill does the regrinding. The under flow of two cone separators furnishes the feed. It contains the coarse stuff and a certain proportion of adhering slime, and passes to the tube mill mixed with sand from the ponds fed into the stream automatically. The outflow from the mill is returned to the cones. The tube mill which makes 26 revolutions per minute, is charged with 12 tons of pebbles of Greenland flints. Wrought iron plates are used for liners. They are ¾x8 in. and cut into 7 and 15 ft. lengths, bolted through the shell. The power for the mill is approximately 50 h. p. when running and 100 h. p. at starting. The grinding capacity is placed at 60 tons of sand per 24 hours.

Stone Bros. & La Borde, of Riverside, Cal., shipped the first car of granite from the new quarries to Los Angeles. One of the blocks shipped will be part of an order for a monument and weighed five tons.

Monuments.

A Prosperous Year.

DANVILLE, ILL., September 19.—W. W. Dye advises: "The last year has been very prosperous with us. Trade has been beyond our expectations. We are crowded with work now. The big trouble we are having getting our work from the quarries so that we can finish it on time. I have just lately taken in a new partner into the firm with me, Mr. Otis P. Haworth, who has been superintendent of our schools here and is quite an able man in a business way, and we hope thereby to increase our business still more and add strength to the firm."

A Record to Be Proud Of.

COUNCIL BLUFF, IOWA, September 17.—The distinction of having manufactured and set up some of the handsomest and most enduring pieces of monumental work in the cemeteries of southwestern Iowa, belongs to Sheely & Lane, proprietors of the Council Bluffs Granite and Marble Works. This firm is the oldest established and best known in this section of the State, and that its popularity is fully as great throughout the country as it is at home, is attested by the number of its monuments found in every cemetery within a radius of 100 miles or more.

Sheely & Lane are dealers in all kinds of foreign and American granites and marbles. Their establishment, which is located at the corner of Grace and Broadway, is large and is equipped with all the latest and most efficient devices for the production of high grade work in an economical manner and they carry an unusually large stock of completed pieces.

Had a Good Season.

BEDFORD, IND., October 2.—G. Underwood & Co. are manufacturers of monuments and during the two years they have been in business, have built up one of the best retail trades in this section. Mr. Underwood is a practical man, having learned the trade under the old firm of Cross & Rowe, who formerly had a shop in Bedford. Later he worked for the Bedford Monumental Works. He finally decided to embark in business for himself about two years ago, and has in that short space of time built up a thriving business. He cuts principally Bedford stone, but takes orders for granite and marble monuments whenever the trade calls for it.

To Move Monuments.

BUFFALO, N. Y., September 13.—It looks as if the many substantial marble and other monuments in the St. Stephen's Catholic Cemetery at Middleport, N. Y., would be razed and removed shortly. Recently the Buffalo, Lockport & Rochester Railway Co. through Charles B. Hill, made application to Justice Pound in Supreme Court of Buffalo, for an order granting possession of a strip of land through the center of the cemetery. The owners of the road asked for immediate possession, as their workmen were on the ground and prepared to lay the tracks. The company was ready to put up a bond to secure the church from loss.

A Promising Young Concern.

TYLER, TEXAS, September 25.—Morris Bros. have recently put in an Oldham & Son surfacing machine, which, added to their already well equipped plant, makes it the most complete and up-to-date plant in East Texas. This firm has only been in existence for one year and has done a good business; far in excess of their original expectations. They make a specialty of Texas gray granite, having in ten months unloaded ten cars of stock on their yard, all of which had first been sold.

New York State News.

SYRACUSE, N. Y., October 2.—The model submitted by H. Augustus Lukeman, of New York, in competition for the contract for the sailors' and soldiers' monument, has arrived here.

WEBSTER, N. Y., October 2.—The ceremony of unveiling the monument to the memory of Frank A. Hallauer, former sovereign of the Order of the Woodmen of the World, took place here recently in the presence of a large crowd.

ALBION, N. Y., October 2.—The massive light gray school building being built here by contractor, P. L. Grear, costing \$75,000.00, attracts wide attention. Work is now progressing on the interior. The building faces on the east and has entrances at the north and west sides.



The Most Popular Monument in the Southwest.

The most popular monument—or style of monument—in the Southwest, without a doubt, is the sort shown in the picture printed on this page. The deserts from Death Valley to the Mojave and the New Mexican deserts, are dotted with them. The monuments, however, are not set to the memory of departed pioneers, but rather to the faded hopes of these men, for they are set out to mark the borders of claims on the desert. These claims are bought by prospectors, and extend 1,500 feet in one direction by 600 in the other. In a section where there is good, rich copper ore, such as there is about Lordsburg, such a claim will cost perhaps from \$100.00 up.

It is well nigh a penitentiary crime to as much as remove a rock from a claim monument on the desert, let alone to attempt to destroy such a one.

The Cemetery Association, of Charles City, Ia., having plans drawn for a chapel and vault at Riverside cemetery.

One of the active concerns in Virginia is Burns & Campbell, located at Petersburg. They were established in 1895 and have increased their business continuously, selling their monumental work in Virginia and North Carolina. Their works are well equipped with the latest mechanical devices and they have good shipping facilities, having a track to their plant, which is on the A. C. line, and they are able to handle their business with dispatch. Being young, active workmen they are attaining the success due to intelligent effort.

Indian Chief Kokomo will wake up in the happy hunting grounds one of these days and find that the enterprising people of that Indiana city have put up a monument to his memory.

Ludwig Mahncke, who has made the San Antonio, Texas, parkway famous, is having a monument and bust put up in his honor in San Antonio.

Martin M. Ryan of Wakeman, Ohio, has opened up a monumental works. He formerly made his home at Norwalk.

One of the enterprising concerns in Missoula, Mont., is the Missoula Marble and Granite Works, which is operated by George Pringle. He has built up this trade in the past sixteen years in Western Montana and all over that part of the state, and his monumental business is growing year by year. He always carries a good stock on hand. His works and yard are well located, and he makes a point of taking good care of his trade.

Business Good; Labor Scarce.

Mr. Z. C. Wilkerson, of Vine Grove, Ky., was a caller at Rock Products' office this month. He reports that while he has been sick personally most of the summer, his business in the monument line was the best for years. He was fortunate in having a son to look after the business while he was on the sick list. Mr. Wilkerson is still under the weather, but between orders and the State Fair he had to drop in on us and of course we were all glad to see him.

Trade Rushing.

QUINCY, MASS., September 15.—J. L. Miller, successor to Thomas & Miller, states: "Business is rushing with us now, and I have orders for more large and elegant monuments than at any time for years. Good workmen are scarce, however, which will make shipments a little late."

Plenty of Orders—Increasing Capacity.

MORRISVILLE, VT., September 20.—Mould & Davis advise: "We have a straight shed with a ten-ton traveling crane running through it and out over the yard. Our equipment includes a large 'Champion' polishing machine, a pneumatic surfacing machine, and fourteen pneumatic hand-tools for lettering and carving. We are employing only twenty men at present. Owing to the necessity of having more power and a larger supply of compressed air, we are about to install a 50 h. p. Westinghouse electric motor and a Franklin air compressor capable of furnishing 130 cubic feet of free air per minute. While we have plenty of orders on our books, including some nice carved work, we are not over-loaded with orders, and can get out Barre granite monuments of ordinary size with a reasonable degree of promptness. For shipping facilities we have the St. Johnsbury and Lake Champlain railroad and, to most points, the rate is the same as from Barre."

Many Important Jobs.

KNOXVILLE, IA., September 15.—Among the recent large jobs completed and set up by O. W. Williams & Son, the prominent east side monument men, are a monument ordered by D. B. Nelfert and set up in the Gullion cemetery; one for Sarah Hollingshead, at the Breckinridge cemetery; a stone for John Schlotterhack, at Grace-land; one for F. Deaver at Lovilia, and two monuments for Mrs. Allard, which were erected in the North cemetery.

Mr. O. W. Williams was for many years the junior member of the firm of Gaiser & Williams, and upon the retirement of Mr. Gaiser, the younger Mr. Williams was taken into partnership, forming the firm first mentioned. Their new shop is the largest in this section and large shipments of marble and granite are required weekly to meet the demand. George E. Gray, a marble cutter of twenty-five years experience, is now in the employ of Williams & Son, and the work turned out by him is the acme of perfection.

Returned After Eight Years.

A couple of months ago Rock Products briefly mentioned that the State of Maine had rejected the bust of Blaine by Prof. G. Trentanove. The bust was executed by Trentanove and placed in the capitol rotunda September 20, 1898. Trentanove is one of the best known Italian sculptors, and one of his famous works is the statue of Pere Marquette, which stands in the old Hall of Representatives in Washington, D. C. The bust of Blaine, however, has never been considered satisfactory, either by the members of the statesman's family or by his friends.

The Professor has never pressed a claim for payment for the work, although for some time past the matter has been the subject of considerable correspondence between him and the executive department. In the first week in June the Professor wrote to the department that he was willing to allow the bust to remain on the payment by the state of \$500.00, but as there was no fund available for the purpose should the purchase of the bust be desired, the offer could not be accepted. Then, by the sculptor's request, the bust was returned to him at Milwaukee, Wis., at the expense of the State of Maine.

A Little Visited Land Mark.

One of the least visited of California's landmarks is the famous Prayer Book Cross in Golden Gate Park. The cross is of sand stone, and standing on a rather open knoll, is visible from afar. As a historic site the place is interesting, commemorating the landing of Drake, back in the Sixteenth century.

To get at the cross itself one has rather to desert the most beaten paths of the park, taking an avenue at the lake, beyond which one can see some of the original dunes that obtained here before irrigation produced Golden Gate reservation. Now and then some men will be seen lounging in the grass, or perhaps a maiden photoing her boyfriend, but for the most part this section of the park is sparsely peopled, beautiful as it is at the lake side.

James H. Campbell, of Colton, Cal., installed a power plant and will do a general marble business. He has put in a polisher, counter sinker, air compressor and a number of other machines.

Captain L. J. Cutter, of Marietta, Ohio, visited the granite section of Vermont in Barre and Montpelier, and looked over the big quarries in view of the purchase of material for a large monumental job under the direction of the Sultana Commission.

W. K. Bullard, of Junesboro, Ill., is erecting a fine monument in Lindsay cemetery of superior Vermont marble. Mr. Bullard reports business very active.

C. B. Webb, of Statesville, N. C., who is a large operator in the monumental line in the South, has been visiting the quarries and manufacturers of monumental stone. He has been for twenty years connected with the industry and makes a trip each year.

Harry A. Wood, of Lebanon, Pa., has recently completed a very fine tablet for the Neversink fire department. It is to be placed in the new engine house which is being erected.

Marion, Ohio, is now receiving bids for putting in a sandstone sidewalk on a number of their principal streets.

The White River Granite Quarries, White River, Wis., are getting out polished stone tablets with inscriptions for the Campbell's Island monument in commemoration of the fight of 1814 between Black Hawk, the Indian chief, and Lieutenant Campbell.

A citizen suggests that Uncle Sam ought to utilize the four corners of the new Federal building in Chicago for installing water fountains with appropriate designs. We second the motion. The quarrymen need the money.

H. J. Brooks, of Devil's Lake, N. D., has moved his marble works into larger quarters, due to increased business.

G. W. Burcher, of Waukon, Ia., reports that business has been very active during the past year in monumental lines.

J. B. Hawkins has purchased the interest in the Cherokee Marble Works, at Acworth, Ga., of his old partner, Jesse A. McClain. Mr. Hawkins has a very active business in the monumental line and we learn that Mr. McClain will open up a new shop at Woodstock, Ga.

OBITUARY.

JAMES CLIFFORD CULBERTSON.

Mr. James Clifford Culbertson died at his home, 21 McIntire Avenue, Zanesville, Ohio, at 4:45 o'clock Sunday morning, September 9, 1906. His age was forty-eight years, and the cause of death, brain disease.

Mr. Culbertson has been connected with F. S. Cary & Co., wholesale granite dealers, of this city, for the past twelve years, and was well acquainted with the monumental trade throughout the United States, but in recent years traveled mostly in Ohio, Indiana and Michigan. The deceased was well known and many friends will mourn his loss. He is survived by a sister, Miss Lillian Culbertson, who made her home with him, and a brother, Charles Culbertson, of Bellaire, Ohio.

Carved Head of Cut Stone in Debris.

A striking sight on Market street for some weeks after the disaster of April 18 at San Francisco was the colossal carved stone head which fell during the fire from the cornice of the Lachman building at the southwest corner of Market and Fremont streets, and lay in the debris on the curb.



The head was carved in high relief from a block of light brown stone about four feet in height which surmounted the ornamentation at the top of the five-story red brick building. It depicted the features of the father of the Lachman brothers who erected the building, and had the head erected as a memorial to their deceased father.

At the time of the fire the building was undergoing reconstruction and a considerable portion of the outer walls was supported on jackscrews. A large amount was to have been spent in modernizing the building and constructing additional stories.

Magnificent Hammered Work.

QUINCY, Mass., September 17, 1906.—Above is an illustration of a costly monument lately erected by A. Marnock & Co., in Philadelphia, Pa. The job for size and workmanship is easily the best of its kind to leave this city for some time. It is essentially a home product, both in granite and workmanship, and speaks volumes for the use of Quincy medium in the construction of large work. The stock is from the celebrated Hitchcock quarry, a possession of the Quincy Quarries Co., and is known to the trade as "Medium." For finely hammered work it can not be excelled, and when parts of a monument are polished as the above the contrast is striking, and has only to be seen to be admired. A. Marnock & Co. have upheld their reputation for careful work in the execution of this design. There is not a flaw in the entire job which stands 22 feet high and rests on a bottom base 7x7 feet.

The polished columns as shown in the illustration, are cut solid, while the exquisite but not excessive carving on the monument adds tone to the entire memorial, and excites favorable comment from the most fastidious observer.



New York State Stone Matters.

SYRACUSE, N. Y., Oct. 5.—Granite cutters from this time on will work nine hours a day. Heretofore they have been working ten, and a movement was started for a shorter period and the monument dealers came to an agreement with them. The wages remain the same, the granite cutters receiving from \$2.75 to \$3.50 a day. There is no union here of granite cutters, although the stone cutters employed in the building trades have such organization. Wages of stone cutters are higher than those of granite cutters, but the latter have the advantage of work the year around and in winter are in doors where the building is heated. Stone cutters, however, have to work in open sheds. But few traveling men have visited the monument dealers recently on account of the fact that the quarries are rushed with orders and it is hard to get prompt shipments.

C. Linehan & Sons, of 617 South Salina Street, have had a good season, the work consisting mostly of small orders. They receive marble from the Gouverneur, St. Lawrence and Watertown Marble companies, all of whom have had an excellent season. The Watertown company has a mill at Watertown while the other concerns are located at Gouverneur.

Charles Thomas is cutting Onondaga limestone for the new Polish church. For the addition to the new Bell Telephone Co. building, Mr. Grannis has cut Barre granite and Indiana limestone. He has just completed a big job at Skaneateles on the Roosevelt mansion.

John Crabtree will be busy at his yards until the snow flies. He has a force of men near the place where the new Armory building is being constructed, cutting Onondaga limestone as fast as the builders use it. At his yard he is cutting Indiana limestone for the same building.

Delaney & Soule, monument dealers, report their trade several thousand dollars better than last season. They find it hard to get all the help they want. Mr. Soule attributes the good business to the general prosperity of the country. The death rate, he says, has nothing to do with the number of monuments sold, as monuments are a luxury, and in hard times are done without, no matter how many persons die.

The Sanborn Granite Co. has had a large out-of-town trade on monuments. They have recently put in a surfacer, manufactured by Thomas H. Dallett Co., of Philadelphia. This is the only one in the city.

Walser Brothers, of New York City, have recently installed one of the Dallett plug drills. This firm consists of three brothers, all of whom are granite cutters by trade.

An odd memorial has been placed in the Evergreen cemetery, at Orwell, New York, over the grave of Charles A. Babcock, a former prominent lumberman. The memorial which was erected by the widow is of marble and granite and is an executed reproduction of a sawmill in the town of Redfield which was owned by Mr. Babcock. The mill is made on a scale of 1 inch to the foot, and is complete in every detail with saws, carriage rolls to carry off the sawed lumber, skids with three logs placed thereon ready to roll onto the carriage car which is loaded with lumber.

A mausoleum has been erected at McGraw, N. Y., to the memory of Miss Elizabeth Hathaway, costing about \$8,000.00. It is built over a cement foundation and is 10x14 ft. and 16 feet high. The mausoleum consists of two bases with plinth and cap, separated by eight polished columns of Quincy granite. The base is an eleven-ton block of granite, polished on the face, with the names of eighteen members of the family executed thereon. It required the services of two teams of horses and two yoke of oxen to draw the block of granite from the railroad station to the cemetery. It took five weeks to erect the monument, with a carload of special machinery and a large force of workmen.

W. F. Malley, who operates a large stone quarry near Marcellus, has made arrangements with the Marcellus & Otisco Lake Railway Co. so that he will be able to ship stone to Syracuse. He has a large order for face building to be used in the new armory.

Benson Mines, near Watertown, which have been closed for about ten years, will be re-opened and the mining of iron ore will be resumed.

Amasa Corbin, of Gouverneur, has bought the property of the Adirondack Pyrites Co., located five miles east of Gouverneur. The ore contains about 70 per cent of iron sulphurettes and 30 per cent of rock waste.

Quarries.

The Quarryman's Needs.

While other building operators in lumber, concrete and especially brick tiling, etc., are moving heaven and earth to increase their business, there are some branches of the stone business that have been in a rut, making monuments or curbing, or something else, and they are neglecting the opportunity of pushing the building stone end of their business. They may occasionally send a man out on a job, but he is generally a new man or is not in touch with the common foe, or when he makes his fight for a job he does it with a lack of enthusiasm that never would win a battle. Now, it is true that we have a number of lines where the promotion of the sales department of the stone business are aggressive to the extreme. They have good promotion departments and pictorially and with their pens are everlastingly wounding the architect and contractor. You see their advertisements in Rock Products, and in other publications, and when their stone is mentioned, the consumer is familiar with it and where it comes from, and what grade of it is better than some other, but that is not true of every branch of the business. I am sure that the reader of the various papers will appreciate that it is his particular line that is lacking in publicity, and that the production of the stone in his particular line is reduced and there are less new buildings to talk about when you go out to sell one, and that naturally requires an answer to the question that is hard to respond to. Now Rock Products is ever willing and anxious to assist any branch of the stone business. Our men have trotted around from one end of the country to the other with camera and pencil, and talked freely of the possibilities of the various kinds of stone, but unless the quarryman himself is in touch with the cut stone man and architect, and will take care of his inquiries when he gets them in an intelligent manner, there is no reason why publicity will make him rich. In other words it takes team work, and we need more of that in the stone business. Because your competitor happens to have another kind of stone there is no reason why you should go around saying it is on the bum. That will not help you any and it may hurt you. Now just a little pulling together as a trade, and individually getting your local people together, will help and we will assist you if you desire to see what we can do to make the sales of your stone 25 per cent in advance of what they were in 1906. This certainly will mean an increase, and we hope you will not put it off until next summer before you commence to work on this promotion plan.

An Illustration.

As an illustration of the possibilities in promoting your business when large jobs are being let nowadays, it is customary for the commission to visit the quarries to see whether it is possible for the bidders to get the stone out to take the contract and also get as much information as possible as to the character of the stone as it appears in the quarry and as it is being worked in the stone sheds. In a section where business is on the decline, it would not be a bad idea to make a special effort to get the cut stone contractors to have their annual meeting near these quarries so that they can be shown the possibilities of the section, or the annual meeting of architects brought to these quarries, and thus give them all the information that you may have, but have not put before the trade with sufficient emphasis to increase your business interests, or letting it slide back because of lack of effort on your part.

Remarkable Absence of Strikes.

A striking feature of the 1905 quarry report just completed by State Statistician Joseph H. Stubbs, is the fact that during the entire year only one day was lost in any of the seventy-nine stone quarries of Indiana on account of a strike. The

total operation of all the quarries for the year was 17,756 days, or an average of 222 days in the year for each quarry. Numerous delays were caused by inclement weather and other unavoidable hindrances.

The quarries of the State during 1905 employed 3,686 men in the works and fifteen in the offices. The amount of money paid to employees in the quarries aggregated \$1,619,835.58. The number of cubic yards of stone quarried was 1,761,883. Of the seventy-nine quarries in Indiana, Lawrence and Monroe Counties have fourteen each. The quarries are divided as follows: Stratified, 53; oolitic, 24; sandstone, 2.

Stone Production Compared.

As it is necessary to make more noise in this coming stone age in order to widen the knowledge of the consumer, as well as the man right in the business, as to the immensity of the stone business, it is apropos at this time to print the figures prepared by the Geological Survey for 1905. This is an advance report from the Department and shows that the value of stone produced in the United States during 1905 was \$63,798,748.00. These reports are not as complete as they might be, but will practically give you a demonstration of the amount of money paid to your industry in 1905, and is divided as follows:

Granite	\$17,563,139.00
Sandstone, not including grindstones and whetstones	8,075,149.00
Marble	7,129,071.00
Limestone	26,025,210.00

In 1904 the corresponding figures were for stone produced, \$58,765,715.00, showing a gain of \$5,033,033.00. The comments of the Department suggest the increase in the output of limestone for the use of furnace flux, in other words, the crushed stone industry, showed the largest increase. This is a natural conclusion, but we know from personal canvass that limestone building materials also showed quite a nice increase. The figures indicate that granite and marble also had an increased production, while sandstone decreased slightly. Limestone, in figures in 1904, showed \$22,178,964.00, and in 1905, \$26,025,210.00, or an increase of \$3,846,246.00. Of course this increase comes from not only building stone, but crushed stone for concrete, limestone and other branches of the industry operating in this line. The building and monument trades use more granite, which includes traprock, gneiss, basalt, etc., for the value was increased over 1904 from \$20,015,025.00 to \$20,637,693.00, or a gain of \$622,668.00. Traprock increased in value from \$2,823,546.00 to \$3,074,554.00 in 1905, or \$251,008.00, and granite proper increased in value from \$371,660.00, or the difference between \$17,191,479.00 in 1904 to \$17,563,139.00 in 1905. The increased value of production of marble in figures was as follows: \$6,297,835.00 in 1904 to \$7,129,071.00 in 1905, or a gain of \$831,236.00. Sandstone, including bluestone, \$10,273,891.00 produced in 1904 to \$10,006,774.00 in 1905, a loss of \$267,117.00, while the production of bluestone increased in value from \$1,791,729.00 in 1904 to \$1,931,625.00 in 1905, or a gain of \$139,896.00, while sandstone decreased \$407,013.00, brought out by figures made in 1904, or \$8,482,162.00, and in 1905, \$8,075,149.00.

The individual figures giving the production by states for 1905 will show more clearly how complete these figures are. One trouble in the past has been to get quarrymen to furnish figures so that the Department in Washington could compile them for the benefit of the business. There is greater need than ever for complete and authoritative figures. Are you willing to do your part by assisting the Government when they make a request by supplying the figures? With detailed figures from every man in the stone business, the exact consumption would then be known and the operator in stone could more intelligently figure out the possibilities for the coming year.

It is the impression of Rock Products that the figures in 1906 will show a much greater gain, not only in the building stone lines, but in crushed stone lines, and that when we are able to present the figures for 1906 in comparison with 1905 they will be very satisfactory all around, for a personal canvass by the traveling men of Rock Products among the quarries everywhere has shown an increase over last year, and where some quarry has gone out of commission there has been at least one started, and in some cases, several to take its place. This does not mean that there is less possibility for the quarry operator to start in, but it

does mean that the use of stone, either natural or manufactured, is greatly on the increase. You can see it as you walk about in any city and this industry ought to be better equipped with information about what it is producing and what it can produce, so that the full market value will be secured for the product of the quarry and the stone shed, and at the same time remove the blinders the quarryman has worn in the past that he may operate with his eyes open, and this increased production, instead of being over an increase of 10 per cent will be nearer 25 per cent. No one doubts but that the material is to be had and its value has proven itself through many ages. With many new kinds of available stone still to uncover in the ground, the next ten years ought to show an increase of 100 per cent or more in the money paid for the production of the quarries.

British Columbia Stone for San Francisco.

A syndicate with large financial resources has been formed in Victoria, B. C., to secure control of the numerous deposits of marble, granite and other valuable building materials in British Columbia. The fact that the rebuilding of San Francisco will require large amounts of building stone of good quality is largely responsible for the new project. Among the properties already taken over is a large deposit of marble of fine quality recently discovered at Nootka Sound on the West Coast of Vancouver Island. An option has also been secured on the Haddington Stone Quarries where the stone used in the construction of the British Columbia Parliament Buildings, erected a few years ago at Victoria, was quarried. The president of the new concern is James Mitchell, of Victoria, head of the Northern Elevator Co. Andrew Wright, a Winnipeg capitalist, is interested. Others are: W. Fernie, S. G. Marling, of Vancouver; J. C. Armstrong, of New Westminster; G. H. Webster, president of the British Columbia General Contracting Co., and James Wilson, superintendent of C. P. R. telegraphs.

British Columbia quarries have been favorably known for a long time in California, many important buildings in the city having been built of stone from that province. One quarry at least, that on New Castle Island, near Nanaimo, has already been drawn upon by San Francisco contractors. The United States mint, which survived the earthquake and fire, was constructed from this stone as far back as 1870. This quarry is now owned by the Northwestern Construction Co., of California. The huge monoliths, almost Egyptian in their massiveness, that grace the entrance to the Call building, came from British Columbia.

While the recently discovered marble deposits on Nootka Sound have not yet been extensively developed, the small quantity taken out furnishes favorable evidence of the quality of the marble. It is grayish blue, beautifully veined and already the syndicate reports having been offered \$7.00 per foot for it by Vancouver contractors. It has proved, on being polished, splendidly adapted for monumental and ornamental purposes. Some handsome specimens recently exhibited have been cut and polished so as to show their commercial value. There are two varieties of marble so far discovered at Nootka.

On Saturna Island there are two distinct varieties of sandstone, buff and blue-gray. The former occupies the upper strata and is of fine grain, free from "shakes" or any considerable quantity of iron. When being worked it breaks straight through, much reducing the cost of quarrying and working. The Carnegie library in Victoria was constructed with Saturna Island stone. The quarry is remarkably well situated for shipment. In calm weather the product can be loaded directly into scows as the cliffs rise abruptly from the sea. The sandstone is interbedded with conglomerate, the strata dipping northerly into the inland at an angle of about thirty degrees, with a slight tilt to the east.

Before acquiring the Atkins lime property at Esquimalt the syndicate had careful tests made of the quality of the deposits. It is claimed to be one of the purest known. Three separate reports have been obtained, one from an expert in Toronto; the second from the United States and the third from the government laboratory in Victoria. On the average the lime runs 99 1/2 per cent pure calcium. Included in the property is also about four acres of almost pure silica sand. With the two necessary ingredients adjoining the syndicate contemplates engaging in the manufacture of sand-lime brick.

Stone and Quarry Notes.

The Galassi Marble & Mosaic Co. has filed articles of incorporation in San Francisco with a capital stock of \$100,000.00. The directors are: T. V. Galassi, Lester Herrick, Anson Herrick, B. W. Bours and Walter Hood. T. V. Galassi has been doing business for some time in this city under the name of the T. V. Galassi Mosaic Co., handling marble, mosaic tiles and terrazzo work. The scope of the business will be extended.

The San Pablo Quarry Co., headed by Anson Blake, a prominent capitalist of Oakland, Cal., is completing its arrangements for developing its quarries near Point Richmond on San Francisco Bay. Electric power obtained from the long distance power transmission lines of the Bay Counties Power Co., which run close by will be used for pumping, hoisting and operating the necessary quarrying machinery. An underground store-room is being excavated in the hill at the quarry and used for storing supplies and stone that is waiting shipment. A seven-ton rock crusher and other machinery has been installed. An electric triple centrifugal pump has been installed near the sea level which will force a large volume of salt water to a high elevation. A large amount of earth will be sluiced off the hill by this hydraulic system and the debris used for filling for the mole that the company is building out to deep water. Both railroad and water shipping facilities will be provided. Besides supplying stone for building purposes, the San Pablo Quarry Co. will furnish crushed rock suitable for use in concrete. Anson Blake has been awarded a contract for supplying a large quantity of this material for the construction of the great dry dock now being built at the Mare Island Navy Yard.

The San Pablo Quarry Co., of Oakland, Cal., has been awarded the \$260,000.00 contract through A. S. Macdonald for constructing one mile of stone sea wall at the Richmond deep water harbor connecting with San Francisco Bay.

A handsome gateway of unique design will be placed at the Tenth Avenue entrance to Golden Gate Park in the Richmond district. This work was made possible by a bequest of \$5,000.00 left to the Park Commissioners by the late Mrs. Susanna Brown, of San Francisco. A design for the gateway has been accepted by the commissioners who stipulated that it should be thoroughly original in treatment. The result shows a considerable departure from the conventional gateway. Two immense masses of native granite will mark the width of the main drive at the entrance, while two smaller blocks of irregular shape will define the limits of the ways for pedestrians at the outer edges of the entrance. The two large stones will be surmounted by sculptured bronze animal figures of colossal size. One will be a representation of a California lion in a characteristic pose, and the other will be a huge bear, typical of the emblem of the State.

Developing New Quarry.

SPRING CITY, UTAH, September 17.—Mr. E. B. Koch, an experienced quarry operator of New York State, is doing considerable development work at the stone quarry, comprising 80 acres or stone west of this place. The stone which the development work has uncovered is of a very satisfactory character, as it is equal to the best white oolitic for which Sanpete County is noted. A force of ten men are now employed in the preliminary work, and the force will be constantly increased in order to hurry the quarrying and shipment of the product.

Formal Opening.

ARCTIC, R. I., September 28.—The Barnt Hill quarry, from which is produced excellent building and paving stones, has just been formally opened, and with the present demand in building circles, a prosperous outlook is assured.

Labor Trouble.

JOLIET, ILL., September 25.—About 250 quarrymen and laborers went on strike at the Joliet quarries last week, asking an increase from \$1.75 to \$2.00 per day. Troubles of this kind are usually looked for at the beginning of the year, and as the season is nearly closed the strike was quite unexpected. Owing to the unusually busy season, this difficulty comes at an inopportune time, and it is hoped the difficulty will soon settle itself.

Will Increase Output.

GOSHEN, N. Y., September 28.—The white limestone quarry at Ogdensburg, is full up with orders at this time. Their shipments are averaging six cars daily, but with the new installation of additional machinery, it is hoped in the near future to increase the amount to twenty cars per day.

To Commence Shipping.

NEW CASTLE, PA., September 27.—The new quarry of the Pittsburg Limestone Co., located on the McGinnis farm in North Beaver township, has been put in full operation. The Pennsylvania railroad is still at work on its sidetrack from Bessemer to the quarry, but upon the completion of this line, which is more than half a mile long, shipping facilities will be complete and no difficulty will be found in marketing the cut stone. The first shipment is expected to be made shortly after October 1.

Old Quarry Will Resume.

HELTONTVILLE, IND., September 24.—The Heltonville oolitic stone quarry which has remained idle since the washing out of the Evansville & Richmond railway, now known as the Indiana Southern, during the inauguration of McKinley, will be reopened next spring by Evansville and Bedford capitalists.

Carthage Crushed Stone Co. has been organized at St. Louis, Mo., with a capital of \$2,000.00. The incorporators are: Ernest C. F. Koken, Richard A. Jones, Charles R. Stickel and others.

U. S. Quarries and Granite Construction Co. has been organized at Augusta, Me., with a capital stock of \$600,000.00 to operate quarries. Mr. I. L. Fairbanks, Augusta, Me., is president and treasurer.

Elgin Stone and Construction Co. has been incorporated at Elgin, Ill., with a capital of \$10,000.00 to quarry and deal in stone. The incorporators are: V. W. Pantan, John A. Logan and Thomas McBride.

The Old Story.

LOCKPORT, N. Y., September 25.—The Medina Quarry which went into bankruptcy some two years ago, is now on the last lap in the course of proceedings, with the result that in the wind-up the quarryman will have acquired experience, quite costly too, and Wall Street will own the quarries.

Judge W. H. Newell and S. H. Atwood are contemplating opening a stone quarry at Portsmouth, Neb. They operate cut stone plants at Cedar Creek and Wymore, Neb., and Amazonia, Mo.

One of the uses to which ground granite is being put now is for fertilizer for anything in the way of plant life.

The granite manufacturers at Barre have at last solved the problem of getting rid of their grout. They figure now that they will soon be able to sell their piles of waste material which cost money to get out of the way for concrete work which, by the way, when accessible and can be had, is preferable to a number of other materials.

Consul Grout, of Villetta, speaking of Malta stone, said that it is used very much as the French caen stone, which is now used in the United States. The cost is seven cents per foot delivered at the Malta water front. Malta stone is light buff in color and is used in practically all the buildings on the Island.

The Columbia Quarry Co. has been organized at St. Louis with a capital stock of \$33,000.00. Chas. A. Krause, Wm. A. Brandenberger and Thos. M. Loretta are the stock holders.

The Phoenix Stone Co., of Portland, Ore., was recently organized by D. W. Reid, R. A. Eva and J. C. Weazle. They have a capital stock of \$100,000.00 and propose to operate quarries and mines.

H. B. Guthrie is the owner of a quarry and stone plant formerly owned by himself and his brother, W. T. Guthrie, of Cygnet, Ohio.

Hymeneal.

One of the events in Eastern Pennsylvania was the marriage on September 12, of Miss Stella Elmira McKenna, of Slatington, Pa., to James Craig, of Philadelphia. Mrs. Craig is the daughter of Mr. David L. McKenna, the slate operator in that section. It marked the forty-first anniversary of the marriage of Mr. and Mrs. McKenna.

New Slate Co. Formed.

ARVONIA, VA., September 15.—The Virginia Slate Co. are buying machinery after organizing to operate a quarry recently opened on the Edwards & Roberts slate tract near Farmville. T. B. Ritnour and W. P. Venable are the principals, and will operate largely in slate. Mr. Will Evans is the local manager. In addition to this company the Williams Slate Co., A. L. Pitts, LeSeuer Slate Co., Root Bros. Buckingham Slate Co., Arvonias Slate Co., Richmond Slate Co., and the Virginia Slate Co., are all operating in this section. The output of slate is now greater than at any time in the history of the business. Labor is scarce, however.

William H. Seabold, of Bangor, Pa., brought suit against the Bangor Hard Vein Slate Co., asking for a receiver.

Adding Machinery.

WAITESFIELD, VT., September 4.—A large hoisting machine purchased recently by the Vermont Black Slate Co. has been put in place and is operating satisfactorily. They are putting in improved equipment to operate extensively.

A Good Season.

HYDEVILLE, VT., September 25.—O'Day Bros. say: "Our business has been very good during the past season, we having all the work we could handle. Have had no trouble with our men. The outlook for the winter season is good and trade continues brisk."

Portland-Monson Slate Co., organized at Portland, Me., for the purpose of quarrying and dealing in slate with \$50,000.00 capital stock, of which none is paid in. Officers: President, John W. Coleman, of Portland; treasurer, Earnest A. Randall, Clifford S. Randall and Silas B. Adams, of Portland.

The Old Dominion Slate and Cement Co., of Palmyra, Tenn., has been incorporated with a capital of \$20,000.00.

Mr. H. W. Calkins has recently been made general manager of the Harpers Ferry Lime Co., at Millville, W. Va. Mr. Calkins was for many years connected with the lime and plaster business in Buffalo, and during this past year has been connected with this company.

Many granite men have been having trouble with their surface points in their tools due to the shanks jumping off. James Ahern, of Barre, Vt., has solved this problem. He has a process by which he puts the tool through and warrants them not to jump off. Several manufacturers have investigated his claims and find it impossible to break the tool's after applying this process.

Business is active with the Lincoln Iron Works, of Rutland, Vt. Their standard gang saws are interesting the people.

There is more active interest in W. F. Ranney's stone working machinery than ever before, although you can see by his advertisement that his machines are located so he could form a United States if the quarry operators were allowed to represent the States individually or as a group. He is located in New York. See his ad.

The Case Manufacturing Co., of Columbus, O., report that their cranes and power hoists are in greater demand than ever.

Charley Grice, manager of the George Anderson Co., located at Newark, N. J., it is said talks in his sleep about Diamond saws. This saw is sold all over the world. Ask him, if you don't believe it.

The Shaw electric crane will handle blocks in the yard with such ease that Manning, Maxwell & Moore, sole sales agents in New York, will tell you that it is only necessary to see one work to prove this statement.

Well made rock drill hose for couplings will save its cost if the right kind. Ask Mulconroy, 722 Arch street, Philadelphia.

Quite Right.

FRIENDSVILLE, TENN., October 2.—"We find Rock Products full of interesting matter. It is so meaty we sent the last number to a friend. Let us have another."

Indiana Oolitic District

BEDFORD.

BEDFORD, IND., October 4.—Just as old wine improves with age, so does the trade in oolitic limestone, if busy quarries and energetic and get-there appearances of the many cut stone sheds of Bedford and vicinity are in the criterion class. One marked feature in the industry is the absence of hurry-scurry, and the very evident physical illustration of the grand result to be obtained by system from the start of stripping the quarries to the tooting of the engine which hauls the finished stone to the market. Then, too, the air of good fellowship that pervades the very atmosphere, is a grand thing; no animosities, and one who didn't know would really feel that it was one grand family, instead of men who are interested in their own individual business, so lacking is the antagonistic feeling usually prevailing among competitors in other industries.

The Henry Struble Cut Stone Co., of Chicago, has just closed the contract for the erection of a large stone mill in Bedford. The Struble Co. has been operating in Chicago for years, but upon the completion of the mill, will move all their interests to Bedford where stone can be had direct from the quarry and where operating expenses will be materially lessened. This is the third new mill to locate in Bedford in six months, representing a total investment of not less than \$100,000.00.

The P. M. B. Co. is one of the largest in the district, and Mr. Nat Joiner, who has entire charge of the quarry operations of the company, is continually on the hustle. Business, as usual, has been very good with this company.

Mr. W. N. Mathews, of the W. N. Mathews Stone Co., is right down to business in shaping up his accumulation of orders, and everything is moving smoothly, although scarcity of men is one of the drawbacks he finds at this time.

The Dugan Cut Stone Co. are in the front rank of the busy procession. The entire time of Mr. George Dugan is spent at Frankfort, Ky., superintending the construction of the new Capitol Building, referred to in our last issue. The camera is entering into the cut stone field and is becoming an important adjunct thereto. Mr. Dugan is taking pictures from time to time of the Capitol Building, which will show the progression of the work.

"In line with the rest," was the remark of Mr. Carl Furst, at the busy sheds of the Furst-Kerber Cut Stone Co. It is a good thing to find a boss who is one of his own men. Mr. Furst was out in the shed taking measurements and personally looking after every detail of the business. They are at this time doing no special large or important work, but simply filling their regular orders which keeps them full up.

Wm. Bradley & Son has just installed a traveller made by the Bedford Foundry Co., and advise that their Ravenswood, L. I., plant is rapidly approaching completion.

Nothing is heard of the recent contemplated quarry on the Clayton land near Union, upon which Mr. John Torphy and Mr. William Benzel were core drilling recently. The material is of a fine character and possibly during the next month, we will hear the familiar news of "another quarry at Bedford."

Mr. Lee Woolery, in charge of W. McMillan & Sons' interest in the Bedford Buff Stone Co., with quarries at Peerless, Ind., is a mighty busy man these days. He was not in town when we called, but advises as to the effect that present orders require him practically constantly at the quarry.

The new mill of the Indiana Cut Stone Co. is practically completed. This company in addition to the progressive spirit shown in the commodious and well planned sheds, are to be complimented on the large and capacious office they have built. Lots of room for drawings and the many details entering into the completion of cut stone for important works is a real necessity, and the

time saved by having a place for everything is an important factor in the investment account.

John A. Rowe has completed the addition to his plant for the handling of his monumental business and is busy in the finishing of contracts taken earlier in the season. He states that there is plenty of work in sight, but had nothing definite regarding any contract of importance.

The Brooks-Curtis Stone Co. have only one complaint, and that is lack of cars. Orders they have in plenty, stone too in quantity to last until the heavy winter weather sets in, but as usual in the fall and spring, cars are scarce, and naturally this retards the making of prompt shipments.

Altogether, the outlook at Bedford is most encouraging. The quarries have no difficulty in getting out stone in desired quantities, and the various cutting sheds have stocks of stone on hand to keep them busy for an indefinite period.

E. L. BORST IS DEAD.

The many friends in the trade of E. L. Borst, manager at Bedford for William Bradley & Son, will be shocked to hear of his death which occurred on the 2nd inst. He was buried at Milwaukee on the 4th, this being his birthplace and home for several years. Mr. Borst was 38 years of age and leaves a young wife. He was for a number of years connected with the Consolidated Stone Co., and left their employ three years ago to go East. He was for two years in Baltimore and other Eastern cities and then married and located in Bedford. He has been in ill health for eighteen months and gradually grew worse and now has gone to his long home. His family and friends have the friendly sympathy of the trade in their bereavement.

BLOOMINGTON.

BLOOMINGTON, IND., October 4.—The first thing that strikes the eye upon leaving the depot is the First National Bank building which is being entirely constructed of stone from local quarries. General contractor Pike is doing this work, and also has the contract for the new Allen building, which will be quite an addition to the city.

Mr. W. F. Sellisman, of Lafayette, Ind., has the contract for putting up the new library building of the Bloomington University, and the work is progressing rapidly.

The site for the new Monroe County courthouse is now being cleared of the debris in order that there will be no delay when the furnishing of cut stone once starts. The specifications require Monroe County stone, but the contract has not as yet been let.

J. A. Hoadley & Sons, with sheds at Stinesville, Ind., have just finished a \$30,000.00 job in Minneapolis. It is a large and handsome office building, and the exterior carving is quite artistic, expert carvers having been brought from the East for this work.

The Hoadley Cut Stone Co. have just installed a new turning lathe, which will swing 8 feet in diameter and 20 feet long. It is expected to have the lathe in working order within the next ten days. One of their important jobs, is a church at Champaign, Ill., Bullard & Bullard, of Springfield, architects, which will cost \$75,000.00 for the stone alone, is taking stone at a fast gait, and with other orders in hand, Mr. Hoadley has his hands full.

Within the next six months a finely equipped quarry is to be in operation on what is known as the Pauley land, a little south of the city and west of McDoel. The Southern Indiana railroad is now arranging to build a track there to connect with the main line, and will spend about \$50,000.00 in this construction. The Pauleys received \$16,000.00 for the land on Tuesday, September 2. Dr. Reed, Albert Klaybolt and J. A. Stanton, of Cincinnati, are interested in the new company. They spent a day in going over the ground, and made a contract to have the ground cleared at once and made ready for quarrying. Core drilling was done about a month ago, and the stone is of a very excellent character. Some \$75,000.00 is to be spent for machinery, etc.

The next step in line with this purchase is the contemplated erection of a cement plant. The Illinois Central will extend their tracks to this point, when this is definitely settled. All the men interested can command the necessary capital for the development of the industry, and it is therefore only a question of a very short time before

Bloomington will be a cement center as well as a stone producing district.

The W. W. Wickes Stone Co. is another new concern just organized, which has taken over 40 acres of land formerly owned by Mr. N. Matthews. This gentleman is also interested in the new concern. Stripping has been begun, and the necessary equipment will be installed within a few weeks.

The United States Quarry Co. have leased their quarry to Mr. E. Wright, of Carthage, Mo., but there is no change of name in the quarries as yet.

The Bloomington Cut Stone Co. have finished installation at their large plant, and under the able direction of Mr. W. T. Blair are now in complete running order, and working full up on their various orders.

At the offices of the Chicago-Bloomington Stone Co., Mr. Wm. Johnson advises that the quarries are working full time and have all the orders they can take care of. The car shortage has made itself felt, but it is a case of "grin and bear it" with both the quarryman and cut stone man.

This same condition of affairs applies also to the Johnson-Matthews Co., and Matthews Bros. This latter concern has its cut stone and sawing mill at Ellettsville, and like all in the vicinity, it has a full complement of business.

The stone men generally feel, and rightly too, that though there is a great demand for concrete blocks in foundations, and work of similar character, yet there will be no lack of orders for stone of good quality and finish. This is certainly the correct view to take of the situation. Concrete and cement certainly fill many requirements of the builder, but stone of good character and good finish will not be supplanted by any substitute. The one thing which will tend to an increased consumption of stone is the education of the architect as to the qualities and possibilities of oolitic limestone. Time and time again have we urged that samples should be had where architects and contractors may physically see the work that can be done with this stone. Educate the fellow who doesn't know, and when he finally knows that he does know, results will speak for themselves.

The Bedford Foundry Co. is making a name for itself, under the able direction of Mr. E. A. Sohn. They have just installed one of their travelers at the Indiana Oolitic Limestone Co.'s plant, in addition to the one recently put in at the plant of Wm. Bradley & Son.

Mr. Ed Thornton, of the Bedford Steam Stone Works, advises that they have recently completed a handsome residence at Colorado Springs, Colo., photograph of which will appear in a future edition of the paper. Just at this time they are working extra shifts getting out orders in the regular line of business, and have no new contracts of any great magnitude.

There are three jobs of some importance which the various cut stone men are bidding on, and which will require close figuring to get, viz: The Cleveland, Ohio, new court house; a large hotel at Mobile, Ala., which when completed will be known as The Battle House, and the new court house at Memphis, Tenn.

Both the quarries and the cutting shed of the Bedford Quarries Co., at Oolitic, present an inspiring picture to the onlooker. The huge blocks of granite, some of which require an entire flat car to transport, are with the many derricks handled as easily as one might throw about a lead pencil. The stripping of Ledge "B" has been started and stone from that quarry will soon be released from Mother Earth and find its way to the cities of the four points of the compass. The club house which the company has for its superintending force is cosy and homelike, and one is quite transported in mind in leaving the immense area of limestone on the one side, and in a short ten minutes walk finding himself seated comfortable in an arm chair, with a capacious library with which to beguile a few minutes of the noon hour.

Mr. Robert Reed with his many interests in the Norton-Reed Stone Co., the Indiana Cut Stone Co., etc., though very busy, found time to extend a hearty handshake and greeting to the Rock Products' representative. Mr. Reed has just returned from a vacation trip through the East, but is now back in harness again with his shoulder to the wheel and pushing along to keep up with orders.

The C. S. Norton Blue Stone Co. have plenty of orders, and are filling them fairly promptly, though with the rest of both the quarries and cut stone sheds, the scarcity of men is quite an annoyance.

INDIANA OOLITIC LIMESTONE



TOWN HALL, STAMFORD, CONN., IN COURSE OF CONSTRUCTION.

BEDFORD STONE, because it can be used anywhere and in any place, attracts commissioners for public buildings. An exemplification of its adaptability will be noted in the new town hall at Stamford, Conn., which is in course of construction. When a building looks good before the fence and scaffolding are taken down there must be something attractive about it. This stone came from the quarries of the Bedford Quarries Co., Bedford, Ind. The cut stone contractors were John Diebold & Son, Louisville, Ky., and the architects were Mellen & Josselyn, of New York City. Herman Probst, Louisville, Ky., was the contractor.

Tell 'em you saw it in ROCK PRODUCTS.

PERRY- MATHEWS- BUSKIRK STONE COMPANY.

GENERAL OFFICES:
320 Monadnock Block, CHICAGO.

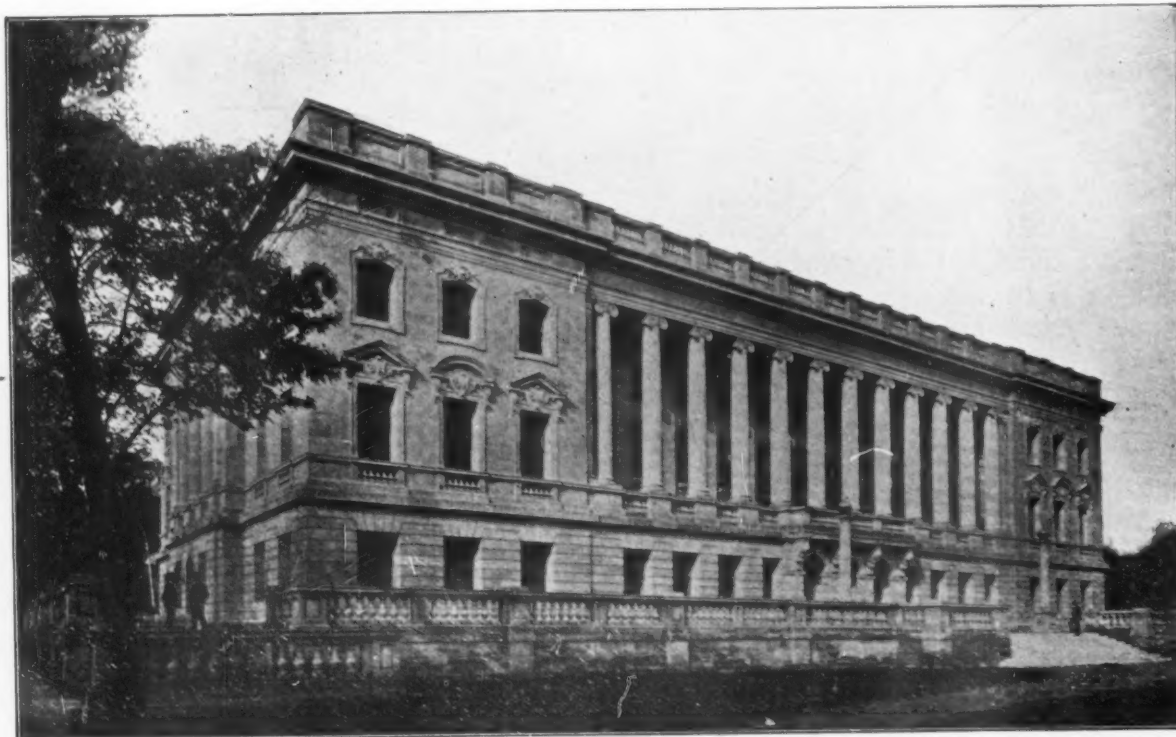
Quarries and Mills:
BEDFORD, IND.

NEW YORK OFFICE, Fuller Building.
BOSTON OFFICE, 45 Milk Street.
PHILADELPHIA OFFICE, Witherspoon Building.
CLEVELAND OFFICE, Hickox Building.



CUT STONE CONTRACTOR, JAMES A. MCGONIGLE, LEAVENWORTH, KANSAS.

The Consolidated Stone Co.,



**DARK HOLLOW
QUARRIES,**
Bedford,
Lawrence Co.,
Indiana.

Producers of the
Celebrated
Dark Hollow Buff and
Blue Bedford, Indiana
Limestone. Their
large mills are equip-
ped with the most
modern machinery,
capable of filling
promptly the largest
orders for SAWED
STONE—every de-
scription of planed
molding—Balusters
and turned columns
and bases of all
descriptions.

GENERAL OFFICES:
322-324
Monadnock Block,
CHICAGO.

NEW YORK OFFICE, 1123 Broadway.

PHILADELPHIA, 730 Witherspoon Building.

BOSTON, 45 Milk Street.

Tell 'em you saw it in ROCK PRODUCTS



BIRDSYE VIEW OF QUARRIES AND MILLS, PART VIEW OF PLANT.

THE BEDFORD QUARRIES CO.,

CELEBRATED

HOOSIER QUARRY

CHICAGO OFFICE,
204 Dearborn Street.

NEW YORK OFFICE
949 Broadway.

CLEVELAND OFFICE,
818 Euclid Avenue.

Quarries and Mills
COOLITIC, IND.

W. McMILLAN & SON

INCORPORATED.

Bedford Indiana Limestone

MILL BLOCKS, SAWED, PLANED, TURNED



CHICAGO MILL:
642-654 So. Rockwell St.

GENERAL OFFICE:
Chamber of Commerce Building
CHICAGO, ILL.

QUARRIES AND MILLS:
Bedford, Ind.
Bloomington, Ind.

tell 'em you saw it in ROCK PRODUCTS.

LEADING PRODUCERS OF BEDFORD OOLITIC LIMESTONE.

We are producers of Buff and Blue

AUDITORIUM HOTEL AND ANNEX, CHICAGO.

Bedford Oolitic Limestone,

Sawed, Turned and Machine Dressed.

OOLITIC STONE CO. OF INDIANA.

CONTROLLING

ROBERT REED, Sec'y-Treas.

THE BEDFORD QUARRY CO.

BEDFORD,

AND THE NORTON-REED STONE CO.

INDIANA.



The Above Buildings Were Erected From the Buff Limestone of Our Quarries.

BROOKS CURTIS
STONE CO.

Sawed, Turned, Planed, Cut,
Ready-to-Set

BEDFORD STONE

Estimates Furnished Promptly
F. O. B. Cars All Parts of U. S.

BEDFORD, IND.

John A. Rowe,

CUT STONE WORKS.

BUILDING STONE

Rustic Monumental Work is Our Specialty.Our design book containing
52 designs, price . . \$1.00

BEDFORD, IND.

BEDFORD STONE

Sawed, Planed,
Turned or Cut

Bedford Steam Stone Works, BEDFORD, INDIANA

Estimates promptly furnished. F. O. B. Bedford or delivered.

Indiana Bedford Stone Co.,

MILL BLOCKS and
SAWED STONE.....

Complete Stock of Seasoned
Buff Stone and Quick Service.

BEDFORD, IND.

Furst-Kerber Cut Stone Company,

— CONTRACTORS —

BEDFORD OOLITIC LIMESTONE

Equipped to Work Winter and Summer.

Our Specialties: Good Workmanship, Material and Prompt Service Guaranteed.

Cutting Plant, BEDFORD, IND.

Main Office, 443 Fifth Ave., CHICAGO.

Granite.

A Growing Business

TEICHVILLE, LLANO, TEX., September 10.—Frank Teich reports a steady increase in the granite business. He is just finishing the granite for the Laredo custom house, and recently completed the granite basement and steps for the Corsicana courthouse. The former work was of gray granite, known as Teich granite, and the latter consists of red and gray granite.

Mr. Teich has just installed a new Ingersoll compressor, and as soon as business slackens up will make further additions to handle his constantly growing trade.

Under New Management.

FORT WORTH, TEX., September 15.—The Fort Worth Granite and Marble Works has been purchased from E. T. Bergin by Wells Bros., who will conduct the business under the old name. This plant was established in 1877, and is one of the most successful in the Southwest.

Opening New Quarry.

SPOKANE, WASH., September 20.—J. W. Morris, of Shenandoah, Iowa, has purchased a granite quarry on the west shore of Silver Lake, three-quarters of a mile east of town, and will at once start operations. Contractor R. W. Carlisle, with a gang of men, is already at work erecting the necessary buildings, including shops, sheds and dwellings. The stone is an extra fine quality of dark gray granite, and submits to a fine polish.

Operating on Large Scale.

OKLAHOMA CITY, OKLA., September 15.—Very extensive quarries have recently been opened by the Oklahoma Granite Co., of Granite, Okla. The stone is of the highest quality of red granite, which, when cut, shows a beautiful, clean dark red color. The tests of this stone show that it stands a crushing strain of 24,000 pounds per square inch.

The company is composed of C. H. Bennett, president; B. B. Bennett, secretary and treasurer, and R. C. Bennett, manager, the latter residing at Granite. A force of twenty-five men and a gang of cutters are getting out stone for building and monumental work. They are operating three derricks, one of which is a 40-ton steam derrick, which enables them to handle blocks of any size. The quarrying is done with air drills and their plant comprises a large gasoline engine and air compressor, enabling them to get out large orders promptly and economically. The company contemplates establishing their business office at Oklahoma City.

Completing Prosperous Season.

LITTLE ROCK, ARK., September 15.—The White River Granite Works, of Batesville, are nearing the end of a very prosperous season. They have just made shipment of a carload of marble to Austin, the principal piece of which was a handsome monument of rustic design weighing 15,000 pounds for the Confederate cemetery at that place. In addition to this there were head and foot pieces for marking the 200 graves of the Confederate soldiers buried there.

Addition to Plant.

INDIANAPOLIS, IND., September 20.—The Co-operative Granite Co., have commenced the erection of a stone shed at Belt Railway and E. New York Street, to cost about \$1,000.00. The company's business has increased steadily during the season, necessitating additional facilities for the handling of their orders.

The Ruggles Granite Co., of Guthrie, Okla., have increased their capital stock from \$50,000.00 to \$150,000.00.

One of Our Busy Friends.

SALISBURY, N. C., September 14.—John T. Wyatt writes: "My granite business is good. We are shipping more street curbing, paving blocks and crushed granite than ever before. Fifteen derricks in the quarries and a large force of men are continually on the hustle. Rock Products is a regular visitor and all hands anxiously look for it."

Change of Interest.

MONTPELIER, VT., September 13.—Temple Bros., of Rutland, have purchased the interests of William N. Theriault, in the Pioneer Granite Co., and will continue the business as before in connection with Mr. Henry Emmons, who retains his interest and will remain in charge. The plant of the company which is located in the sheds of the American Granite Co., will be considerably enlarged to handle their increased business.

A Model Plant.

JAMESTOWN, N. Y., September 17.—E. A. Sturdevant has now a model granite plant at West Second and Washington Streets. An 11 h. p. gas engine, and large air compressor is included in the new installation, which will enable the plant to receive the blocks of granite in the rough and do all the finishing, lettering and cutting under the able direction of Mr. Sturdevant. Orders are coming in rapidly from all sections of this State and Pennsylvania, and the workmen are very busy filling the contracts.

A Big Order.

CHICAGO, ILL., September 26.—The Waushara Granite Co., 172 East Washington Street, are supplying the Twin City Rapid Transit Co., of Minneapolis and St. Paul, with all of the granite paving blocks required by them this year, and are just finishing a 1,500,000 order. This is the first Wisconsin company to ship granite blocks to Minnesota.

All of the Wisconsin quarries are rushing and the outlook is for a heavy demand this fall.

C. W. Hills, a prominent dealer in granite, at Jackson, Mich., and who took an active part in the National Organization of Granite Dealers, has returned to Jackson after an extended trip.

Asks Appointment of Receiver.

SEATTLE, WASH., September 17.—The R. C. Bowers Granite Co. has asked the court for the appointment of a receiver for the Puget Sound Marble and Granite Co., alleging that the defendant company is insolvent; that it has liabilities aggregating \$13,000.00 and assets of only \$10,500.00. The plaintiff company alleges it takes action on account of a debt of \$1,855.90.

New Quarry Has Water Power.

MCCLOUD, OKLA., September 14.—Peter Schual, of Ardmore, has leased a tract of granite near Tishomingo, and will at once arrange for quarrying the stone. A dam will be constructed across Pennington Creek, and about 200 h. p. developed for operating the plant.

New Yorkers Buy Quarry.

BANGOR, ME., September 23.—The Stimson granite quarry at West Sullivan has been sold to the Benevue Granite Co., of New York. The property consists of 700 acres of high grade gray granite, with millions of tons in sight, where several operations have been carried on for the past fifty years. The new company operates in New York, Connecticut, and Stonington, in this State.

It is understood that the new owners will build three miles of new railroad on the old rockbed and the present wharf so as to give dock room for six large schooners at once. Steam and compressed air will be the power used. It is likely that 100 men will be busy all the fall and winter on preliminary work, prior to actual quarrying and shipping for next season.

Bids Open Until October 13.

Bernard R. Green, superintendent of construction, National Museum Library of Congress, Washington, D. C., will receive proposals until Saturday, October 13, for cutting and delivering the Bethel white granite from Vermont and for

furnishing, cutting and delivering the Milford, Mass., pink granite required for the south pavilion of the new building for the National Museum. Specifications and general instructions for bidding can be obtained by applying to above.

Some Nice Orders Received.

Keene, N. H., August 14.—The Perry White Granite Co., of this city, and Fitzwilliam have received the contract for the monument to be erected to the memory of Gov. Tanner, of Illinois, at Springfield. The monument is in the shape of a rustic temple and is 36 feet long, 25 wide and 27 high. The dome is supported by rustic columns 2 feet 9 inches in diameter and 9 feet high. The interior is of rustic finish, with bronze panels set into the walls, also a niche for the bust of Gov. Tanner. The body will be interred in the center of the floor, which will be of polished granite in mosaic form and covered with a polished tablet or ledger with inscriptions. The monument will weigh 600 tons and will require 7,000 cubic feet of granite. Among other nice orders recently completed and shipped to Pittsburg, Pa., parties, is a monument in the shape of a broken tree weighing about 20 tons. The diameter of the tree was four feet and it stood 16 feet and 6 inches high.

A Fine Granite Deposit.

WICHITA, KAN., August 31.—There lies at our very doors, near this city, a mountain of granite of the finest quality for the manufacture of building material and monuments, and a plant would find it profitable in order to supply the demand for such material in this immediate territory. The granite is of various shades of red, and admits of the finest polish. It has been tested and analyzed at different granite producing points and found to be of fine quality. The quantity is inexhaustible and lies above the surface of the earth which insures a minimum cost of quarrying. This bonanza lies so near this city that the charge for transporting the rough stone to this city need not be more than six or eight cents per hundred weight.

This city's facilities for distributing the finished product into the entire Southwest is peculiarly complete, thus affording an advantage to a polishing plant not possessed by many cities in the West. By reason of these unexcelled conditions it is evident that a granite polishing plant located here would prove eminently successful as a wealth producer, and a dividend payer. The capital and the experience in this special line of business, however, must come from localities where this trade is known. Any one acquainted with the business and seeking new fields in which to extend the trade, should by no means overlook this opportunity at Wichita. We will have an abundance of natural gas for manufacturing purposes by November next, which will be drawn from the richest gas fields in the world near this city.

The population of Wichita is 40,000, her climate is superb, and her advantages for cheap and comfortable living is unsurpassed in any respect. The city is equipped with electric street car systems, electric lights, water works and every other modern improvement for the comfort and convenience of mankind. The Commercial Club of this city is a live institution, and ever awake to its best interests. Any information in regard to the city may be secured by corresponding with its secretary.

There never was a time when there were so many men employed in cutting granite blocks in various granite sections, due to the increased popularity of granite for paving. It is a sin and a shame that more of the grout piles in stone quarries could not be used for this purpose, but between the politician and his graft and the freight rates people have to suffer for want of good granite paving, and the quarry has lost the business.

The Richmond Granite Co., of Richmond, Va., incorporated with \$50,000.00 capital recently, with Robert M. Pollard, secretary, Louis C. Williams and Paul P. Shafer, incorporators. They will operate in the East, purchasing and dealing in granite and quarry lands, doing a general construction business, manufacturing concrete articles, as well as monuments.

BARRE, VERMONT.

BARRE, Vt., September 26.—Aside from the fact that there has been no abatement of the unusual heavy run of summer business, one of the most interesting things that have happened this month was the annual clam bake given by the R. C. Bowers Granite Co. to their patrons in the polishing supply trade of Barre and Montpelier, including both the employers and their men who work at the wheel. This is the eleventh consecutive year that in recognition of this generous patronage the users of Bowers' supplies have been royally entertained as the guests of this up-to-date firm. It was a rather dismal, rainy afternoon on September 22, but notwithstanding the hostility of the weather over 300 of the invited guests took advantage of the time honored Bowers hospitality, and enjoyed the handiwork of the noted colored clam bake artist, whom Mr. Bowers has annually imported from Providence, R. I., to provide the feast of clam chowder, steamed clams, lobster, corn and sweet potatoes. The aforesaid artist is a king at the trade. Seats and tables were provided as usual under the big circus tent erected by the host at Fountain Park, between Barre and Montpelier, and at the close of the banquet each guest was presented with the customary Dutch pipe and tobacco as a souvenir of the occasion. Before and during the feast sweet music was discoursed by Whittier's full orchestra of Montpelier.

Walter Young, of the firm of Young Bros., and manager of their branch office at St. Louis, has been in town for a few days calling on his brothers and other friends.

Water Power Changes Hands

One of the surprises that have been sprung here recently was when, on the 20th, at a village meeting, held in Northfield, it voted to sell the water power at West Bulin, which has been owned by the village for the past ten years. The deed to the same was immediately, after the meeting, transferred to William S. Alexander, of Barre, for a consideration of \$900.00. The property is located just north of the granite plant owned by Davis Bros., and is an unfailing and extensive water power. Mr. Alexander was formerly a partner in the firm of Bugbee & Alexander, and national secretary of the National Association of the Granite Industries of the United States, and is one of the most prominent men in the granite monumental trade of the country. It is rumored that Mr. Alexander contemplates building a granite plant on the property recently purchased by him, but he is at present connected with the Boutwell-Milne-Varnum Co., and when interviewed on the West Bulin properties, he said he expected to build a plant there some time, but had nothing to say about it at the present time.

New Granite Quarry.

A new granite quarry has recently been opened at Bethel on the opposite side of the village, from the Ellis and Woodbury Granite Co. properties, and about two miles from the village. The quarry was opened to obtain stone for a bank building in Bethel, and the outlook is very favorable. The granite is very white and somewhat finer than the Ellis granite.

A few days ago some section men on the Barre branch of the C. V. railroad found a man unconscious and badly bruised and cut about the head, lying beside the track. An ambulance was called and the injured man was taken to the Heaton hospital in Montpelier, where he was identified as George R. Davis of Montpelier, an expert granite carver and letterer, and one of the most highly paid workmen in this section of the State. An examination showed that he had suffered a severe cut on the head and concussion of the brain. Although the accident occurred at about 1 o'clock Saturday afternoon, he did not regain consciousness until Sunday morning. It appears that he had boarded the train, and about two miles out was seen to go out of the rear door of the rear car, lose his balance on the platform and fall headlong on to the side of the track. His condition at this writing is serious.

An accident on the quarry of James K. Pirie a few days ago resulted in the loss of four toes by Ned Nutbrown, one of the men employed on the quarry. A heavy block of granite fell on the man's foot, crushing it badly and necessitating the amputation of four toes. Outside of this accident Mr. Pirie reports a very satisfactory condition of things at his quarry this month.

George Ross, a well known stonecutter here, has

accepted the position of superintendent of the practical end of the Warren Granite and Marble Co., at Warren, Ohio. Mr. Ross was formerly in the newspaper business.

W. R. Hadley, of the firm of Melcher & Hadley, has been enjoying a several weeks' vacation among his friends in Maine.

Entering New Fields.

John Anderson, who, for the past thirteen years, has been a prominent citizen of Barre and a first class granite cutter during that time has gone to Guilford, Maryland, to become superintendent of the granite cutting plant of the Maryland Granite Co. Mr. Anderson has been prominent in public affairs here and leaves many friends who feel confident of his success in his new position.

Charles A. Brown, who has been local manager of the Cook & Watkins Granite Co. office here, for the past year, has gone to Boston where he will have charge of the Boston office of the firm. William H. Duthie, cashier in M. & W. freight office, will succeed Mr. Brown in Barre, having resigned his position with the railroad company.

E. O. Townsend, a well known wholesale granite dealer of Mansfield, Ohio, has been a visitor in our town this month.

An important quarry deal has recently taken place in connection with the A. C. Blanchard quarry property which has been owned and operated by Mr. Blanchard for the past year or more. The business has been incorporated and other parties have become interested with Mr. Blanchard. The Empire Granite Co. has been formed with a capital stock of \$50,000.00, the members being A. C. Blanchard, of Montpelier; Patrick Crowley, of Montpelier, and Cross Bros., of Northfield. The company controls the Patton, Cheney and Carnes quarries. Mr. Blanchard is president, George Cross, of Northfield, vice president and manager; John Cross, of New York, secretary and treasurer, and Patrick Crowley, superintendent.

Dean K. Lillie, of Montpelier, is reconstructing one of the wings of the Sweeney Bros.' shed at Montpelier into a straight shed, which will be 210 feet in length and 63 feet wide. It is already equipped with a travelling derrick, and a boom derrick will be erected in the yard.

Harry J. Bertolli, of Montpelier, is making plans to erect a new cutting plant on land owned by him and what is known as the Pioneer Mills in Montpelier. Mr. Bertolli expects to commence work on the shed this fall.

Temple Bros., of Rutland, Vt., a well known retail firm, have bought W. N. Theriault's interest in the Pioneer Granite Works of Montpelier. Harry Emmons will continue as manager of the plant as heretofore.

John Grant, Mr. O'Neill and the younger Mr. Rosebrough, all well known retail dealers, of St. Louis, have been in Barre during the present month placing orders.

J. Tonella, of the granite firm of Tonella & Sons, of Milford, N. H., has been calling on friends in town this month.

Allen L. Smith, of the Smith Bros. Granite Co., Montreal, was in town recently visiting his brothers, John and Donald, of E. L. Smith & Co. Mr. Smith reports a lively business this fall in Montreal and vicinity.

Electrical Equipment.

The E. B. Ellis Granite Co., at Northfield, have erected an electric hoisting derrick in their yards west of the railroad tracks. The mast of the derrick is 70 feet in height and the boom is 75 feet. The electrical attachment gives much quicker operation than the old style and it is likely that the time is not far distant when most of the Barre quarries will be equipped with them.

The annual outing of the Vermont Press Association was directed this year at the granite hills southeast of Barre City, and the visit to the wonderful quarries which supply a large portion of the country's demand for monuments was a decided revelation to the pencil pushers. They were shown about the quarries and the big cutting plants by National Secretary W. S. Alexander, and at the quarries, W. H. and Guy Varnum, of the Boutwell-Milne-Varnum Co., and E. P. Coleman, manager of the Wetmore & Morse Granite Co., assisted in the entertainment. The newspaper men of Vermont never dreamed before of the vastness of the industry so firmly planted within their gates during the past few years, and since the visit editorial pens have been flying fast in every section and corner of the State in an attempt to make the people at home appreciate the magnitude of the present Barre granite industry, and the possibilities and probabilities which are

awaiting it in the future. They were no less astonished at some of the cutting plants than they were at the sight of the quarries.

As the result of the annual balloting and the election in quarry workers international union, Barre will be the headquarters for the union for the next three years. The vote for Barre was 753 with Quincy, Mass., second with a vote of 142. P. F. McCarthy was re-elected secretary and treasurer for a term of two years, he receiving 896 of the 1040 votes cast. This union has been in existence now for three years and has a membership of 5,500 with 101 branches. Mr. McCarthy is a good square man for the position, and so long as such men as he is, are at the head of the union end of the business the employers can feel pretty sure of a square deal.

There was a terrible accident at the cutting plant of E. Abbiatti & Bros., about the middle of the month; in fact, one of the most horrible that has ever taken place in any of the Barre granite sheds. Guy Boyce, a lumper employed at the shed, was literally torn to pieces and killed. Shortly after the plant started up in the afternoon Boyce went up to the top of the low shed to oil some of the gearing while the machinery in the polishing mill below was running. Just how he came to get caught in the machinery is not known, but it is thought to have been due to carelessness. The clothing on his left leg became entangled in the gearing and the unfortunate man, unable to extricate himself, was thrown rapidly about, revolving with the shafting. The leg was literally pulled out of the body at the hip and the body fell to the ground when thus released, the limb remaining where it hung in the gearing until taken down by the men. Medical aid was at once summoned but there was no help for the man. He died in about half an hour. He was 35 years old and leaves a wife whom he married but a short time ago.

The deal has been closed in Montpelier whereby Bonozzi & Bonozzi, of that city, have purchased from Robert Fraser his cutting plant near the Pioneer Mills for a consideration of \$7,500.00. They moved into the shed last summer.

Serious Accident.

An accident occurred on the Concord & Claremont branch of the Boston & Maine railroad at 11:30 o'clock forenoon which resulted in the serious injury of Ola Anderson, a prominent granite manufacturer of this city, who had both arms cut off. Engineer Bradley, of the train, was also hurt.

The cause was an open switch, which sent the train upon a siding and into a flat car. Mr. Anderson was on a flat car superintending the loading of granite when the train ran into the siding. He was crushed against the boiler.

Alexander Innes, formerly of the Innes & Cruikshank Quarry Co., accomplished by Mrs. Innes, left to-day for a visit with friends in New Haven, Conn., after which they will go to Scotland for a several months stay at Mr. Innes' former home near Aberdeen.

Beck & Beck report a very busy month. Lothar Beck is devoting his entire attention to the management and superintendence of the quarry, while Werner Beck has full charge of the management of the cutting plant.

The Smith Bros. Granite Co. have taken an unusual amount of splendid work for fall and winter delivery. They are just shipping a nice mausoleum to parties in Binghamton, N. Y., and are cutting several large monuments, among them being a fine canopy job for New York.

It is rumored, with some pretty good information back of it, that one of the biggest granite building concerns in the country is soon to purchase some extensive quarry property in Woodbury and erect a large cutting plant in Hardwick.

Things are coming their way for the Granite City Quarry Co., when it gets to the point of having accidents that make money for the firm. Accidents on the quarries usually have the opposite result. The company was planning to put in a new derrick early next month, the boom and mast having been already ordered, but they were using the old derrick until the new one shall arrive. The crew had been warned to be careful in lifting any heavy stone, and so when a block of granite for Bianchi & Sons was lifted this week the crew took to the woods for safety. The stone was too heavy for the derrick and down it came with a crash. This is how the company saved money. They figure that it would have cost them \$50.00 to get the old derrick down. In its fall without assistance the derrick machinery was damaged to the extent of only \$10.00, so the accident earned \$40.00 for the victims, and as their new derrick

was almost ready to set up they were not materially inconvenienced in getting out their orders.

Better Prices.

This is the first time in the history of the Barre granite industry that the writer has heard any considerable number of manufacturers express themselves as realizing that they are getting better prices for their work. One man said the other day that with business as good as it is at present he could get almost any price he would ask. Notwithstanding this pleasing condition of things, however, the prevailing prices on Barre work are not very much higher than they were in dull times. But it is sufficient to let the manufacturer understand that a very slight percentage of increase makes an astonishing lot of difference when it comes to think of putting something in the stocking for a rainy day.

E. Caviechi thinks business must be pretty brisk with the retail dealers, judging by the orders that have been coming to him for polishing machines during the past few weeks. He shipped fifteen of them to retail dealers during the past month and is considering the matter now of enlarging his plant to take care of his increasing business.

J. K. Pere is putting up a new twenty-five ton derrick at his quarry.

C. W. McMillan & Son are very busy at their cutting plant this month, but have not received many orders yet for winter delivery.

Adie & Milne are cutting some very nice sarcophagus monuments and one of them in particular is very unique in style and design. The bottom base is 9-4x6-8. The first die is 5-4x7-10 and this is hollowed out into a tomb large enough to enclose two caskets. On top of this die is a plinth 7-8x4-8, and above this is another die cut hollow to receive a single casket. This die is 7-10x3-4x2-2, and above this is a cap 7-2x2-8. The first die is carved on the front while the rest of the job consists of plain hammered work and moulded.

A New Departure.

E. L. Smith & Co. are just making an interesting departure at their big quarries that will be watched with interest by the other quarry owners. They are putting in a big 75 h. p. electric hoist made by the Mead-Morrison Manufacturing Co., of Cambridgeport, Mass. This is the first big electric hoist ever tried at the Barre quarries, although A. E. Bruce & Sons put in a small one a short time ago. The Wetmore & Morse Granite Co. are going to follow suit immediately by installing another derrick which will be a duplicate of the one which E. L. Smith & Co. are putting in.

Mr. Russell, superintendent of the Bodwell Granite Co., and Mr. Landers, of the Hurricane Island Granite Co., of Maine, have been in town this week to see if there was anything new in Barre.

Moore Bros. & Brault are shipping a splendid mausoleum this week to Fairview, N. J. There were seven carloads of it. They are also cutting among other work, a notable sarcophagus job. The bottom base is 10-6x6-10. There are three bases and a sub-base. The second and third bases are moulded. The die is adorned at each corner with a cluster of columns, each cluster having three columns, and the capitals of each cluster are heavily carved. The front of the die is carved with raised festoons and a shield, both above the family name, which is in round raised letters. The cap is heavily carved and above this is a final, moulded and carved. It is a decidedly elaborate and artistic monument.

The Smith, Whitcomb & Cook Co. have just got out a casting for a new derrick for the Woodbury Granite Co., that is one of the largest, if not the largest of any in the stone business. The casting itself weighs over two tons and the derrick is to be of 100 tons capacity with probably a great deal of additional power above its rated capacity.

Rizzi Bros. have got about \$20,000.00 worth of work under the hammer in their shed at the present time, with lots of other work on their order books. They have already booked four carloads of orders for February delivery. They have just put in a new Blaisdell air compressor. They have now two compressors in operation, one for the big surfacers and the other for the small tools.

A visit to Drew Daniels in Waterbury, found him busy with big work and everything running in good shape. He is cutting, among other monumental work, two large mausoleums. One of them has a roof stone 13x10-8x1-2. The name of the firm was changed a short time ago and will be known hence forth as the Drew Daniels Granite Co.

QUINCY, MASS.

QUINCY, MASS., September 27.—The outlook for continued prosperity in the local granite field is promising. There is a quantity of work under the hammer and more being figured upon, so that the fall and winter seasons will be busy in the extreme. A canvas of the quarrying and manufacturing districts warrants the assertion that Quincy has experienced a busy year in its staple industry. Both large and small sheds are being worked to their capacities and no cutters are loafing. On the other hand there has been a noticeable dearth of cutters all the year, which in some instances has handicapped the manufacturer not a little. So brisk has been the building trade throughout the country that a large number of practical cutters follow this branch of the business in preference to the monumental line.

This is true, chiefly, of the young unmarried granite cutter, and every year, when the building trade starts, there is an exodus of this class of cutters from this city. The lack of sufficient cutters this year has had a tendency to delay work, but in no way has the work been slighted. There are just as many expert cutters in the city to-day as there have ever been, but their number is smaller than in preceding years.

Progress toward the completion of the new freight yard north of the Quincy Adams Station, is slow. The sheds and office building have been removed and everything is ready for the railroads next move toward putting the yard into better condition. That the work will be completed before next spring is almost a certainty, and the rush months from a shipping standpoint, will be welcomed, so easy and improved will be the facilities.

A Center for Polished Work.

Polished work in Quincy granite shows no decline, as is evidenced by the number of polishing mills in the city, every one of which is worked to its capacity. There are more mills to-day of extra large size than any granite center can boast of, so that as a polishing city Quincy is easily in the lead. Outside granite is railroaded here just for the polishing and shipped back to the original contractor. This, with the excess of local work, makes polishing a valuable adjunct of the trade. No expense has been spared in the installation of the latest and most improved machinery, so that the equipment of the plants is perfect and able to cope with the jobs of the largest size.

There has been a growing tendency lately for the average manufacturer to own and operate a polishing mill in conjunction with his cutting plant, and one which will attend to his polishing needs. These with the large mills in operation bears out the fact that there is a lasting demand for the local granite in its polished state.

The quarries in town have never been worked to such advantage. The weather has more than favored this branch of the industry and all along the line the quarries have been worked to their capacities and have produced an excellent yield.

At a recent meeting of the Manufacturers' Association the following officers were elected to serve during the ensuing year:

President, John L. Miller; vice president, Thos. F. Manne; secretary, Thos. J. Dunphy; treasurer, James Joss. Executive committee, president, vice president and treasurer, ex officio, with Henry McGrath, P. T. Fitzgerald, Alfred O. Diack, John C. Murray, Patrick W. Driscoll and James A. White. Membership committee, Robert Mayer, William T. Spargo, Geo. Clarke, James A. White and Patrick W. Driscoll.

Representative William S. McNary, from the Tenth Massachusetts Congressional district, of which Quincy is a part, spent a few hours in Washington September 16, looking after matters in which his constituents are interested. He finds that the Quincy public building is sixth on the list to be taken up by the supervising architects' office. At the rate the office is disposing of work the plans for the building will be finished in about three months. Mr. McNary suggested to Mr. Taylor, the supervising architect, that time could be saved by throwing the plans open to public competition, but that is a matter that Secretary Shaw can alone authorize.

Mr. McNary will later renew the suggestion to Secretary Shaw. He also impressed upon Mr. Taylor that the building should be built of granite, as granite is one of the things for which Quincy is world famous, and it would be only appropriate that native granite should be used in its construction. That suggestion will also be re-

ferred to Secretary Shaw. If Secretary Shaw should deem it advisable to construct the proposed public building from home granite, it would prove a benefit to local trade. The quarries hereabouts just teem with granite admirably adapted for building purposes. This can be cut by skilled mechanics almost within gunshot of the proposed site, and thereby cause a great saving in cost of material for the new building.

It would be in excellent keeping also to have this building constructed in Quincy granite, for the reason that the immediate neighborhood of the proposed site, there stand to-day the city hall and Adams stone temple, which are everlasting monuments of the beauty and substantial qualities of the home product. The city hall, constructed in 1843 and the Adams stone temple, where repose the mortal remains of Presidents John Adams and John Quincy Adams, built in 1826, are lasting memorials to the foresight of the town fathers who authorized their construction from the products of the town's vast store house of granite. It would be eminently proper for the Manufacturers' Association or Citizen's Union to agitate this question and present the matter in the proper light to Secretary Shaw at an early date.

Better to start at once than to have local granite men bemoan their fate later, when granite other than Quincy's famous stock is being used. Rock Products' representative will back the local granite men in their endeavor to win their point in this particular if the matter, as proposed, takes any tangible shape. Congressman McNary needs help in this matter and let every granite man in the city, be he manufacturer or quarry owner, give his hearty support to the movement. Better the trade be saved the humiliation of seeing their granite cast aside than the repetition of the loss that has lately come to the notice of Rock Products' local representative. The State of Massachusetts, in its Highway and Park department, is constructing along Quincy's water front a boulevard which will extend inland to the Blue Hill reservation. The thoroughfare will be several miles in length, yet all the curbing for the boulevard is cut in Concord, New Hampshire, and from Concord granite. There is something amiss here, either among the individual granite men or Manufacturers' Association as a job of its kind with the financial account entailed, could be just as well placed among local quarry owners and granite men.

Fatal Quarry Accident.

Working eighty feet below the surface of the earth in Quarry No. 1 of the Granite Railway Co., in West Quincy, one man was instantly killed and three others were severely injured by an explosion shortly before 10 o'clock Wednesday morning, September 12.

The dead and injured list is as follows: Wm. Larson, 35 years of age, fractured skull, died instantly, leaves a widow and two children. Injured: John L. Miller, foreman of the quarry; James Malone and Charles Kappella. The above injured are at this writing fairly comfortable and are expected to recover.

The blast which caused death and injuries, was the remnant of one fired on the day preceding. Quarrymen familiar with the workings of powder said that it was probably a case where some powder intended for Tuesday's blast work down into the seams of the rock and remained unexploded. Wednesday morning men were put to work getting out rock which had been loosened by Tuesday's blast. To help them in their work they were supplied with air drilling machines which work fast. It is thought that a spark from the rapidly revolving drills set fire to some powder which failed to explode on the day previous and caused the premature explosion. Physicians responded hastily to the hurried call, but were handicapped in their "first aid to the injured" work, owing to the depth of the quarry, which is not easy of access. The accident was the worst of its kind in this city since 1897, when three men were killed in a neighboring quarry.

Johnathan Swingle, known to the trade as "the extra dark man," has purchased twenty acres of quarry land adjoining his present possession and will develop the abandoned Berry Bros' quarry thereon. Mr. Swingle is confident of unearthing some more extra dark stock in this vicinity, as well as a fine quality of medium granite.

Foreman Hunter, of the Hitchcock quarry, a valued possession of the Quincy Quarries Co., is developing some prime stock in the northerly section of the quarry. A railroad several hundred feet in length, runs to the bank of this section,

which makes easy the disposition of top layers. These are shunted some distance away where a gang of paving cutters are fashioning the stone into valuable paving blocks. The quarry, on the whole is producing some excellent stock which finds a ready market.

John Fallon & Sons have secured a long term lease of the old Fred and Field quarry, off Quarry Street, and will enter the building market in the near future. The stone known as medium will also be used as bottom bases and makes valuable building stock. The firm members are experts in their line and will doubtless profit by their new venture.

The Merry Mount Granite Co. is busy at its quarry possession upon the installation of a mammoth air compressor, will prove a valuable adjunct to the quarrying of this excellent stock.

John C. Ballou has installed the latest improved air compressor at his quarry possession on the North Common.

Over on the Plains in the heart of the manufacturing district, business is especially brisk.

James Craig & Co. have been continuously on the move rushing the completion of the Lawson tomb. Rock Products was first of the journals to mention this important work, the largest of its kind to be placed in Quincy for some time.

If local and out of town granite men want to keep abreast of the times they will have to identify themselves with this up-to-date trade journal. Not even the local press had a mention of the Lawson job until after its appearance in Rock Products. This month, James Craig & Co. have had a corps of letter cutters at the Lawson estate in Dreamworld, lettering the interior tablets of the tomb. Great secrecy was maintained by the celebrated financier as to the wording of these tablets, and contractor and workmen were instructed to guard the secret carefully. It is said, however, that the bulk of the lettering goes to compose an original poem by the author of "Frenzied Finance."

John R. Richards, the well known manufacturer, has the sympathy of a host of friends in the loss of his estimable wife which occurred on the 21st inst., after a lingering illness.

The studio building of Herbert W. Beattie, the sculptor, has been moved from its location near the Quincy Adams station to a point nearby, making room for the new freight yard at this locality.

Michael Burns and Harry W. Nichols have been doing jury duty at the county seat in Deaham, during the month just passed.

E. & B. Bishop are occupying their new and modern appointed shed on Intervale Street, South Quincy.

Robert Caniley reports a satisfactory business to date and is at present turning large and small jobs from several different granites. His 600 baluster contract from Milford pink granite, for the Pennsylvania terminal, is almost completed.

A Gigantic Carload.

The Quarry Railroad Co. recently shipped a carload of granite weighing 108,000 pounds.

The Quincy Column Turning Co. report several baluster jobs of no mean proportions, which will grace buildings in process of construction in New York City. One contract calls for 500 small sized balusters, 2 feet by 8 inches, from Vinal Haven granite, and another 68 balusters 1 foot square by 3 feet 9 inches high, from Emerson Troy granite.

George Ruxton is busy upon large and small jobs in both Quincy and Westerly granites. The grade of work Mr. Ruxton turns out is his best advertisement, and once a customer is secured, he generally stays, as no imperfections or doped work goes at this establishment.

Goldbranson & Co. are doing a nice business at their modernly equipped plant on Vernon Street, South Quincy.

D. E. Cameron reports an excellent business and is confident of having a busy fall and winter season.

Phillip Binns, of Cleveland, Ohio, visited the trade during the month just passed.

Arthur L. Mitchell, Jr., of the Falvey Monumental Co., Washington, D. C., returned the first of the month after a visit to the granite centers of New England.

John and James McDonnell, of Buffalo, N. Y., made a brief visit to the local branch of McDonnell & Sons this month and report the firm's business as being in the best possible condition. Mr. Robert McDonnell has charge of the local branch, where a force of workmen is constantly busy upon large and small orders.

John S. Mitchell, traveling salesman for A. M.

Dean & Co., left last week for an extended trip through the Western and Southwestern States.

Pavement cutting is getting to be an important industry throughout the city and owing to the good condition of the quarries there has been a large increase in the number of workmen at this line. The open weather has also helped to increase the amount of pavement so that at the end of the season a large stock of finished pavement block will be ready for market.

Returns from the shipping terminals for the month of August show the total amount of rough and finished granite shipped to have been 13,583,129 pounds. The amount was forwarded as follows: West Quincy, including the Quarry Railroad, 8,114,825 pounds; Quincy Adams, 5,468,304 pounds.

John Jess Dead.

John Joss, a well known granite manufacturer of Quincy, and president of the Joss Bros. Granite Co., died at his home, 24 Garfield Street, Sunday morning, September 30. He was 66 years of age. Mr. Joss was a native of Parish Forque, Aberdeenshire, Scotland, and came to Quincy more than thirty years ago. He was a member of Rural Lodge, A. F. & A. M., and the First Presbyterian church. He leaves a wife, one son and three daughters. Deceased was eminently respected and held the confidence and esteem of a large circle of friends. He was identified with the granite business in its several departments, since his arrival in Quincy.

Granite for Street Paving.

REDGRANITE, Wis., September 26.—Perhaps it might interest some of your readers to know where the granite chiefly comes from that supplies the Chicago market for street paving.

In central Wisconsin there is a large outcropping of granite, about 25 miles in extent, running from northeast to southwest, beginning at Redgranite and ending at Montello. Most of the quarries that have been opened up since the Northwestern railroad came in are within a distance of six miles of each other and employ, when running, over 700 men.

The railway came in about five years ago and the following quarries are developing with more or less speed, viz.: Redgranite, Williams and Rowlands, Milwaukee Monument Co., Waushara Granite Co., Milwaukee Granite Co., Northern Granite Co., and last, but probably destined to be the greatest, West Point.

These are the chief sources of supply for paving the streets of Chicago and Milwaukee with granite blocks and crushed stone. Monumental stock comes chiefly from Montello, although the other quarries mentioned do something in that line also, and building stone can be supplied by all of them.

Alongside this granite belt and running the same direction lies an outcropping of a Rhyolite stone, beginning at Berlin and ending at Devil's Lake. These are operated chiefly for crushed stone. Berlin, however, is not confined to any one kind.

A new outlet has been found this year for the product of this granite district in Minneapolis and a large quantity of granite blocks have been shipped from the Waushara Granite Co., and the William Bannerman Co., at West Point, keeping these quarries busy this summer, and they have recently received a large order from The Chicago Union Traction Co., which will keep them busy the rest of the season in making and shipping blocks for Chicago.

WM. BANNERMAN.

About Our Friends.

The Pittsburg Crushed Steel Co., of Pittsburg, Pa., are arranging their sales department so they will be within easy reach of their factory. They make diamond crushed steel.

That Kotten, Jr., surfacer is a soothing machine, because it is simplicity itself and don't talk back.

The Ingersoll-Sergeant catalogue, No. 45, dealing with rock drills is artistically printed and, gee, it is chuck full of information. A quarry superintendent ought to have it right on his desk. It is so systematically gotten up it tells you all about the various parts and what for and how you can use the Sergeant drill, the Universal drill, and it gives you the parts and tells you how to order them and talks about gadders, but it don't mention anything about old maids or bachelors, however, who are pretty good gadders themselves.

A Progressive Concern.

The Saco Valley Granite Co., of Fryeburg, Me., with head office at 161 Devonshire St., Boston, Mass., was incorporated under the laws of Maine, with a capital of \$150,000.00, in January last, but did not start operations in their quarries until April. Starting with a small force, the business has increased so rapidly they now have forty men employed and are rushed with orders. The company have some large contracts for bridge and building stone, curbing and paving blocks, and are shipping bottom bases for monuments all through New England and the West. One of the latest contracts received was from the Maine Central railroad for ten granite piers to be erected at Woolwich and Bath, Me.

The company have recently placed an order for a compressor besides surfacers and plug drills and have a number of other additions to their plant in view. The Maine Central railroad have just contracted with the company to extend their tracks up to the quarry which is about one-third of a mile from the track at present. This will enable the company to make prompt shipments, besides greatly reducing the cost over present methods. This company has recently subscribed to Rock Products and say, "We find the paper full of interesting quarry news at all times."

Fine Quarries at Bethel, Vermont.

Washington's new Union Railway Station, that is to cost well up into the millions, is to be constructed of white granite quarried from the hills of the little town of Bethel, Vt. Where a few years ago was a hill pasture and a sugar orchard is now an important industry. Hundreds of men are scattered over the quarries of the Woodbury Granite Co. A branch railroad winds up the steep incline and bears the granite away to the cutting sheds, and hundreds of thousands of dollars' worth are yearly taken from the hillside.

The first step in the direction of activity there was when the Woodbury Granite Co. opened its quarry. This was a big undertaking. The woods had to be cleared from the site of the quarrying operations and the earth removed from above the stone, while all the product that was quarried had to be hauled five miles by teams to the railroad. Before the quarry was fairly opened, when there was just enough cleared space to permit the operation of one derrick, the company took the contract to furnish the stone for the Henry Payne Whitney mansion in New York. Superintendent W. C. Clifford worked heroically to carry out this contract and was able to do so. After that came the Bailey mansion, in Commonwealth Avenue, in Boston, and the Exeter County court house in Delaware, and these, with some minor contracts, assured the success of the company. The granite proved of such fine quality that the E. B. Ellis Co. bought a tract of land below that of the Woodbury Co., and opened a second quarry. The Central Vermont railroad built a branch to the quarries and now the stone is taken from the hill direct to the great cutting sheds of the Ellis company at Northfield, Vt. This company secured the contract for the Washington railway station, and both quarries are now being operated for the production of the stone. The Woodbury Co. operates a cutting plant on the bank of the river near the village, and the Ellis Co. has its sheds at Northfield.

This Bethel granite is the whitest known, free from iron, not so hard as most of the Vermont granite, takes a pleasing finish and is in great demand for building purposes.

The operation of these two companies have introduced a new feature in the granite business of the State. The Woodbury Co. is an illustration of the success that is sometimes forced on men. The Holden & Leonard Co., operating a knitting factory at Bennington, Vt., had a claim on a granite quarry at Woodbury, and eventually had to take the quarry to make good their claim. The Woodbury Granite Co. was then formed, consisting of Messrs. Holden & Leonard, and H. W. Bickford, son-in-law of the latter, to operate the quarry. None of the members of the company were familiar with the granite business, and Mr. Bickford, who was placed in charge of the practical operation, had to learn it as he went along.

But the Woodbury works prospered, the Bethel quarry seemed a necessity to produce such stone as was needed for certain kinds of work, and with some misgivings the Bethel quarry was opened. To-day the company has its Bethel plant and another at Woodbury and Hardwick, and is among the successful granite firms of the State.

Granite.

The following is culled from our excellent contemporary, the *United Operative Masons' and Granite-Cutters' Journal*, as a good example of Scottish trade verse:

Granite, ye hae stood for ages
Far up the rugged mountain side,
Frae the pinnacles an' ledges,
Frownin' upon the world wide.

For countless years man has socht ye,
Frae sunny shores to northern climes,
For many uses man has wrocht ye,
Improv'in' ever wi' the times.

Ye've ne'er been surpassed for buildin's gran,
In statues ever bold an' braw,
Magnificent oot ower the lan'
In shades an' hues ye beat them a'.

In cemeteries sae glum an' grave,
In monuments ye lead the van,
An' granite headstones 'mang the laive,
To pay the last respect to man.

Busy and Happy.

OMAHA, NEB., September 25.—The Great Western Granite Co. say: "Less than a year ago, we broke ground for our building, we are now occupying which is 65x80 feet with a railroad track in the center, traveling crane, complete equipped polishing mill and pneumatic tools. From the 15th day of January, when we began manufacturing, we have been rushed to the full capacity of our shop, working over-time, and now employ twenty men and have orders and room for twenty more, especially first class letterers.

"We are cutting mostly Barre, Missouri Red and St. Cloud. We are busy now with a mausoleum. Have sold ten carloads of monuments, including a large shaft and other work since we started. We are confining our efforts strictly to granite and do not handle marble in any form.

"We have been unable to keep a salesman out all the time as we have been short of finishers. There is a great deal of large work to be set this fall and early spring. Prospects for business never were better. We are interested in your paper, especially in granite, and read it from 'kiver to kiver.'"

McKinley Memorial of New Jersey Granite.

MONTCLAIR, N. J., September 15.—To the editor of *The Times* that they gave credit to Vermont as having furnished the granite to the McKinley memorial which was unveiled yesterday at Columbus, O., by Mrs. Alice Roosevelt Longworth, whereas this monument was procured from a new quarry at Pompton Junction, N. J. J. HARPER BONNELL.

The Thomas Monument Association, of Nashville, Tenn., in which the railroad employees have a large representation, are to erect a monument in memory of J. W. Thomas, the former president of the Nashville & Chattanooga railroad, of Willsboro blue granite. They gave the contract to the Willsboro Granite Co., of Rion, S. C. The platform for the base of the shaft will be 40 feet square and 5 feet high and stone steps will lead to the floor. The shaft will consist of a base, die and cap, and will be mounted by a bronze statue of Major Thomas nine feet high. The entire statue will be 26 feet high and there will be eight carved seats on the platform and at each corner there will be a granite post bearing an electric light.

A monument 65 feet high has been erected in Dublin in memory of the Irish leader, Parnell. St. Gaudens' model is now on the way to Italy to be cast in bronze. The figure is 8 feet high and a striking likeness to Mr. Parnell.

A company has been incorporated at Pierre, S. D., to collect huge boulders on the Missouri bluffs and they will use them as tombstones and monuments. The company intends to install machinery to polish the boulders and propose to use them also in construction work.

A movement is on foot in Washington, D. C., to erect a \$10,000.00 Pocahontas monument at Jamestown. The association has about raised the money for this purpose.

The Las Vegas Improvement Co., of Las Vegas, N. M., has their new polisher working and are very much pleased with it.

Source of Pumice Stone.

Pumice, as is well known, is of volcanic origin, being a trachytic lava which has been rendered light by the escape of gases when in a molten state. It is found on most of the shores of the Tyrrhenian Sea and elsewhere, but is at present almost exclusively obtained from the little Island of Lipari.

Most of the volcanoes of Lipari have ejected pumaceous rocks, but the best stone is all the product of one mountain, Monte Chirica, nearly 2,000 feet in height, with its two accessory craters. The district in which the pumice is excavated covers an area of three square miles. It has been calculated that about 1,000 hands are engaged in this industry, 600 of whom are employed in extricating the mineral.

Pumice is brought to the surface in large blocks or in baskets, and is carried thus either to the neighboring village or to the seashore, to be taken there in boats. The supply is said to be practically inexhaustible. Pumice is used not merely for scouring and cleaning purposes, but also for polishing in numerous trades; hence the fact that the powdered pumice exported exceeds in weight the block pumice. Between twenty and thirty merchants are engaged in the pumice trade on the island.

To Supply Building Stone.

SALT LAKE CITY, UTAH, Sept. 24.—The P. C. Lyman Stone Co., which is operating stone quarries in Parley's canyon of which P. O. Perkins is manager and J. L. May, secretary, is now opening up its quarries, a full force of men being engaged in getting things in condition to be able to supply the orders that are coming to them. This company has lime and building stone in unlimited quantities. The advent of the new company will, in a degree, mitigate the scarcity of building stone now existing. Contractors and builders state that they have been unable to get rock enough to keep building going on.

Flattering Prospects Ahead.

COLUSA, CAL., Sept. 22.—The stone industry in Colusa county was developing rapidly before the San Francisco disaster, and two quarries, the Colusa Stone Co. and the McGilvray Stone Co., at Sites, were in operation. The supply of stone is unlimited, and when San Francisco commences to erect permanent structures the demand for Colusa sandstone will be great. There are several large buildings in San Francisco constructed from this stone, among which are the Ferry building, Flood and St. Francis. In Honolulu a large hotel was built with this stone. There is a hill of solid stone here which belongs to the Colusa Stone Co. and they have the most glowing prospects for the future.

Progressive Sand-Stone Operators.

JOHNSONBURG, PA., Sept. 28.—Some years ago G. A. Gocello, of Falls Creek, and Antonio Giordano formed a partnership and began quarrying and shipping sandstone in this locality. Several years after Mr. Gocello withdrew and Mr. Giordano continued in business. Mr. John Addeo was subsequently taken into the business which has since been run by these two men under the name of the Johnsonburg Stone Co. They manufacture all kinds of building and bridge abutment stone and their output is shipped to many sections. Last summer this company did a business exceeding \$30,000.00 and shipped stone to Washington, D. C., Havre de Grace, Md., Wilmington, Del., Perryville, New Port, Cattawissa, Nescopeck, Corryville and many other points in Pennsylvania. The stone was largely used in the building of bridge abutments on the Pennsylvania and Baltimore and Ohio railroads. They are at present operating ten derricks, employ 70 men and are working seven teams.

Last April a new company known as the Elk Sandstone Co. began operations. Those interested are Salvatore Cerro, Perantorio Ferdinando, Felice Addeo and Frank Carravella, with Angelo Marasco as manager. The quarry is located about a mile and a half south of town on the B. R. & P. railroad and the company is at present operating five derricks and employing fifty men. The company has already worked up a good business and is shipping about \$4,500.00 worth of stone a month,

and have contracts to last them the entire season. They are now shipping stone to Mt. Union and Ryde, Pa., where it is being used by the P. R. R. in the building of their large arch bridge.

The sandstone rock in this territory has no superior as a building stone and an evidence of this fact is the general and increased demand all over the country for it.

Progressive Concern.

SPOKANE, WASH., September 14.—One of the principal quarry operators on the coast is the Crystal Marble Co., with headquarters at Spokane and quarries at Ady, Wash. The Ady quarry was opened two years ago, and a complete equipment of machinery and derricks was installed. At that time, the stock had to be hauled ten miles to the railroad. Nine weeks after this quarry was opened 6,000 feet of marble was delivered to the Spokane mill. They purchased some months ago, the business of H. Sammis Co., and are at present operating that quarry. In addition they have a mill at the north end of Division Street bridge in Spokane.

Speaking of the business, Mr. F. A. Chase, secretary and general manager, said: "We are operating our plant to the full capacity and installing machinery as fast as possible in order to take care of the increasing trade. The officers of the company are: Walter G. Merriweather, president; F. H. Simmons, superintendent; F. A. Chase, secretary and general manager.

It is a great pleasure to make mention of this progressive concern of the many that are operating in this territory. For several years they have been employing from twenty to sixty men, and have in hand at the present time over \$100,000.00 worth of business.

The curse of the business in this territory has been the stock selling and promoting concerns who have, on paper, marble quarries to burn. Over half a million dollars have been spent in Northeast Washington, where there is supposed to be such large deposits of marble, but unfortunately the total shipments of marble from that section of the State will not exceed 4,000 cubic feet a year.

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STONE COMMENTS.

Fire Tests on Stone.

The following comments on the subject are from the columns of the *Builders' Journal*, of London, England:

"A good deal of information has been published with regard to the fire-resisting qualities of certain building stones and the general effects which are known as the result of actual fires in buildings. Tests have been carried out from time to time, which have not perhaps been very thorough or systematic, but they have all brought out the distinguishing characteristics of the effect of fire. The latest tests which have been carried out recently by the geological department of the New York State Museum have been carefully made, and we give below a summary of the results obtained.

"We may introduce this, however, by references to two previous American investigations into the subject. Cutting, in 1880, carried out some experiments for the 'Weekly Underwriter' in order that insurance rates might be adjusted. His conclusion was that granite would not stand fire, and that granite walls were injured beyond the possibility of repair, and would have to be taken down after a fire. Sandstone he found to resist fire better than granite, while limestones and marbles were of superior value to sandstone. They seldom crack from heat and water, but when the heat is excessive they slightly crumble on the outside if water is thrown on them. When cooled without the application of water the injury is much less. If the temperature rises greater than 900 degrees F., and is long continued, they are changed into quicklime so as to flake off and crumble down. Conglomerates and slates show no capacity for resisting heat, as the slates crack, and conglomerates are almost immediately ruined.

Buckley.

"Buckley performed a number of experiments in 1898 upon the building stones of Wisconsin which were published in 'The Wisconsin Geological Natural History Survey Bulletin' of that year, which confirmed Cutting's investigations. Buckley, however, gives the reasons why stones do not resist fire very well in the following words:

"Other things being equal, it appears that a rock having a uniform texture and a simple mineralogical composition has the greatest capacity to withstand extreme heat. It is known that rocks are poor conductors of heat, and for this reason the outer shell of a rock may be very highly heated while the interior remains comparatively cold. If, after heating, the rock be quickly cooled, contraction of the outer shell takes place. The differential stresses occasioned thereby ruptures the rock and the outer shell is thrown off."

The Present Fire Tests.

"As regards the latest tests on New York building stones, the details of the work were carried out by Mr. W. E. McCourt under the superintendence of Professor Heinrich Ries. Eighteen samples were selected for testing, these being types representative of those produced in New York State. A few examples are, however, not now used for structural purposes.

"The samples from each locality are cut into three-inch cubes. Most investigators, who have studied the refractoriness of building stones, have selected one and two-inch cubes; but these sizes do not give as accurate results as the larger ones, for the reason that a small piece becomes easily heated throughout the mass and consequently upon neither heating or cooling are differential stresses between the interior or exterior likely to be set up, as would be the case if larger cubes are selected. In actual fact in the burning of a building the stone does not become thoroughly heated; the heat penetrates probably but a slight distance into the mass, while the interior may remain comparatively cold. The heating and cooling of this outer shell causes strains which do not obtain in a stone which has been heated throughout its entire body. One, two and three-inch cubes of the same kind of stone have been tested in the laboratory, and while the smaller cubes stood fire very well, the larger ones were more affected and

in some cases went to pieces. It was to avoid this error and to approach more closely the existing conflagration that three-inch samples have been employed in the present series of tests.

Six Tests on Each Stone.

"As far as the number of cubes would admit, six tests were made on the stone from each locality, four furnace and two flame tests. For the first set of experiments a Segar gas furnace was used, thus allowing the cube to be gradually and evenly heated. An opening was cut in the cover of the furnace large enough to admit the three-inch cube of stone, to which a wire had been attached to facilitate its handling.

"One sample was heated at a time. The heat was applied gradually for half an hour until a temperature of 550 degrees C. was reached, which was maintained for half an hour. The temperature was measured with a thermo-electric pyrometer. The cube was then taken out and allowed to cool in the air. A second sample was heated, as before, to 550 degrees, and this was suddenly cooled by a strong stream of water. The third and fourth cubes were heated to 850 degrees C., kept at that temperature for half an hour and cooled slowly and suddenly as in the 550 degree tests.

"In order to approach more nearly the conflagration conditions samples were subjected to two flame tests. In the first case the cube was so placed as to be enveloped on three sides by a steady but not strong gas blast. The flame was allowed to play on the cube for 10 minutes, then the samples were allowed to cool for five minutes, after which time the flame was again applied for ten minutes, and the cube was again allowed to cool. To determine the combined action of heat and water a second cube was subjected, as before, to the flame for ten minutes, then a strong stream of water was turned on to the sample, along with the flame, for five minutes. Then the water was turned off and the flame continued for another five minutes, after which, for five minutes more the flame and water together were allowed to act on the sample.

Conclusion.

"It is unnecessary for us to give the results of all these tests in detail. The generalizations which Mr. McCourt has drawn are, however, of interest and value. He thinks it is difficult to group the different kinds of stone in any order, for they vary among themselves, and also act differently under different conditions.

"A stone which under some conditions stands up very well, will disintegrate under other conditions. Thus, for example, the granite from Northville acted very badly on fast cooling after having been heated to 850 degrees, yet, under the combined action of flame and water it was little damaged. Additional variations of this character all go to show that, for one temperature, the order of resistance will differ from the order given for another temperature.

"At 550 degrees C. (1,022 degrees F.) most of the stones stood up very well. The temperature does not seem to have been high enough to cause much rupturing of the samples, either upon slow or fast cooling. The sandstones, limestones, marble and gneiss were slightly injured, while the granites seem to have suffered the least.

Temperature of Actual Fires.

"The temperature of a severe conflagration would probably be higher than 550 degrees C., but there would be buildings outside of the direct action of the fire which might not be subjected to this degree of heat, and in this zone the stones would suffer but little injury. The sandstones might crack somewhat; but, as the cracking seems to be almost entirely along the bed, the stability of the structure would not be endangered, provided the stone had been properly set.

(To be continued.)

A Forger Wanted.

The Chief of Police, at Bellefontaine, Ohio, is sending out a description of a forger who has been visiting the monumental men in Ohio and incidentally separating them from their money. This man is 35 years old, 5 feet 8 inches tall, weighs 160 pounds, smooth face, dark hair, and has rather a broad face. He is a preacher-looking chap with double breasted coat, striped pants and broad brimmed felt hat. He carries a monumental design case of tan leather, 16 inches

long, 15 inches high and 5½ inches thick. He carries advertising matter for E. B. Houk, of Piqua, Ohio, also samples of granite and registers as H. J. Murphy, Zanesville, Ohio, Houston, Texas, and Dayton, Ohio, and represents himself as selling monuments and Texas lands. Arrest this man and send information to the Chief.

The Mulconroy Co., 725 Arch Street, Philadelphia, Pa., manufacturers of rubber boots and coats together with every description of outfit for quarrying under adverse weather conditions report a satisfactory business in this line of goods for the present season. Especially does this refer to their special brand of protected quarry hose which is the most reasonable article of supply to transmit steam or air power to drills and pneumatic tools that has ever appeared, beside being an economical convenience to the contractor who uses machine drills or air tools of any description. It is stated that where they once receive a trial order for this protected hose it means a constant customer, for their goods give satisfaction all the time.

David McKenna, Slatington, Pa., the well-known producer of slate and dealer in slaters supplies has just issued a pictorial catalogue which contains a good deal of useful information not only for the practical slater but for the architect and intending builder as well. It gives the shapes, sizes, and prices of all kinds of slate that are consistent with good practice at this time. The activity in the roofing proposition is now assuming importance and Mr. McKenna will be delighted to furnish a copy to all inquiring parties.

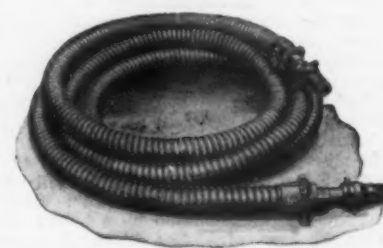
The F. R. Patch Manufacturing Co., Rutland, Vt., announce their new diamond saw which can be furnished with single or double platen in design and belt or motor driven as desired. They claim that this machine has all the up-to-date features and request the attention of the marble and limestone mills of the country to this tool which has been specially designed to meet their requirements.

The Piedmont Granite Co. has been organized at Lexington, N. C., with a capital stock of \$10,000.00. Zeb Deaton and others are interested.

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Fine Red Sandstone.

POTSDAM, N. Y., Sept. 18.—There are few handsomer stones for architectural purposes to be found than Potsdam red sandstone, quarried and finished by the Potsdam Sandstone Co. Repeated tests and actual experience in building work proves that it is one of the most durable of stones. Composed of minute quartz-like sand grains, bound together by a natural silica cement it is practically unaffected by climatic conditions, does not scale, crack or disintegrate and as a result the finest carvings may be made of it with confidence that the most delicate lines will stand for years against disintegration. Its crushing strength, too, is remarkable, being much higher than the ordinary sand and limestones and equal to the hardest granite and superior to most of the architectural granites. Although extremely hard and durable it can be wrought into all the shapes required by modern building, including the most exquisite carvings and mouldings. So great is the resistance of this stone to fire that it may be and is used in the place of fire brick for lining furnaces, kilns, etc. For imposing and massive buildings architects have found this an ideal stone. It is red in color, of a pleasing shade and harmonious in its variations.

Blue Sandstone in the West.

MIAMI, I. T., Sept. 26.—The stone quarries of I. T. Williams, which face Tar creek for a quarter of a mile are the finest in the Indian Territory, being a fine, hard, blue sand stone, unexcelled for building or flagging purposes. The layers are from 2 1/4 inches to 3 feet with less than a foot of waste on top. The stone is almost free from iron or other minerals that stain or discolor; hence will retain its natural color, making it superior to any sand stone we have ever seen for fine buildings and can be obtained in any size, shape or quantity. Stones for flagging or curbs can be furnished sixteen feet wide and fifty feet long in one solid piece, building stone six inches to four feet thick, any size. The strata runs uniform in thickness. The first strata is four inches thick, the second six inches and increases in thickness to four feet.

The quarries are inexhaustible and are located one mile east of Miami. Many handsome and substantial buildings in Miami and neighboring towns are constructed of this stone. Mr. Williams is a member of the Ottawa tribe of Indians, and was born seven miles east of Miami. He secured his allotment of 80 acres, on which the quarries are located, in 1892.

Winnipeg, Manitoba, building operators have been bothered with a strike recently. The Builders' Exchange have had a stormy session owing to the fact that some contractors are beginning to get impatient, but all still feel that they must settle the strike only on the basis originally decided upon.

The Maine Coast Granite Co., of New York, N. Y., has been organized to quarry granite. The capital stock is \$500,000.00. The directors are: Walter J. Roberts, Merrick D. Lawrence and Richard A. White, all of New York.

Messrs. Casey & Broderick, Springfield, Mass.; T. W. Nickerson, Hyannis, Mass.; A. Carbo, Newark, N. J., and Maurice Flynn, Westerly, R. I., were among the granite men to visit the trade during the past month.

Frederickton, N. B., is to have a Burns monument. It is to be unveiled on November 18. McIntosh & Gullett, of Toronto, have the job in hand.

Alfred L. Davidson, of Chesterton, Md., who has conducted the Chesterton Marble Works for several years sold out to James W. Kirby, of Baltimore. Mr. Davidson will remove to Wilmington, Del., where he will have charge of a large granite works.

Arthope & Witt, of Macon, Ga., were recently adjudicated bankrupts.

The Sturtevant Mill Co., of Boston, Mass., have been presenting their friends with catalogue No. 15 of their steel rock breakers. This machine contains many superior features, and has been a success from the start. It is of unequal strength, owing to its steel construction, and is thoroughly reliable. The crusher runs at one-half the speed of others to obtain excellent jaw reciprocation. Each revolution causes two crushing breaks. Slow speed and reduced vibration does the work satisfactorily. No rock is too hard for it, and its actions speak louder than words.

Sand and Gravel.**Modern Equipment Important.**

The several operations in the sand industry are growing in importance, as the demand for a better quality of sand increases. The dredging or digging of sand, while still an important operation, has been augmented by the invention and adoption of equipment which would not alone facilitate the first labor, but would also make it possible to increase the profits as well. Separators, screens, hoisting and drying machinery are some of the improvements that go toward making the modern sand operation a business of some importance.

In this age when the call for different grades of sand has become so common, it is essential that the sand dealer take this subject to heart and act in accordance with its precepts. Without a well equipped plant, comprising all the best in the line of modern auxiliaries for the sand operation, the dealer labors under a great disadvantage, and must of necessity be a laggard in the race for business and its consequent prosperity.

One Railroad's Operations.

The Lake Shore and Michigan Southern gravel pit at Pleasant Lake, in Steuben County, Ind., is now sending gravel to many of the Eastern states and they have about \$100,000.00 invested in their plant there. They lately put another steam shovel at work, making a total of four, and they are running seven or eight gravel trains a day. Their pay roll at the pit amounts to over \$8,000.00 a month.

The Kelly Filter Press Co. has been organized at Salt Lake City, Utah. The company is formed to acquire the patents for and manufacture a filter press and a machine to separate sand and lime. The capital stock is \$50,000.00 and the par value of the shares is \$1.00. The officers of the company are: President, James W. O'Neill; vice president, A. G. Gordon Wilson; treasurer, Earl R. Pembroke; secretary, Albert L. O. Genter; managing director, D. J. Kelly. These, with J. M. Callow, constitute the board of directors.

The McCurdy Sand Co., of Steubenville, Ohio, has been incorporated with a capital stock of \$2,000.00. D. C. McCurdy, A. G. White, Robt. H. Russell, Edward McKinley, Jr., and J. C. Davis, are the incorporators.

The Eureka Sand, Stone and Building Co., of Klamath Falls, Ore., has been incorporated. The capital stock is \$10,000.00, and the incorporators are: J. G. Pierce, E. B. Henry and G. P. Mims.

The Buffalo Sand Co. has been organized at Hamburg, N. Y., and will deal in sand, gravel and building materials. The capital stock is \$15,000.00. R. Y. Milne, E. M. Milne, of Hamburg; H. Rice and C. Rice, of Buffalo are the incorporators.

Hutchison, Kan., is to have a new industry. It is to be operated by George White, who built the drainage canal. This is a sand dredging and shipping business. The Arkansas river bed contains an inexhaustible supply of the finest building sand in the world.

Getting Ready for Operations.

NEW ORLEANS, LA., Sept. 16.—Some Pennsylvania business men have just organized, under the laws of New Jersey, the Orleans Gravel and Sand Co., which, as its name suggests, will engage in the sand and gravel business in New Orleans. The company has already applied to do business in the State and was admitted some six weeks ago, its State agent for Louisiana being George H. Terriberry. Mr. Terriberry is simply the legal representative till the company is properly launched in its business here. The active conduct of the business will be in the hands of experienced sand and gravel men. The company

has already acquired inexhaustible sand and gravel beds in the neighboring territory. It has let contracts for the construction of barges, of which it expects to have a larger fleet than any of its competitors here. The car service here has not been found to be adequate, and Mr. Terriberry will leave for Philadelphia in a day or so, where he goes to consider with his principals the advisability of buying their own steel cars in order that delivery of sand and gravel may be made by cars as well as by boat.

Big Paving Brick Concern.

TOPEKA, KAN., September 10.—The Capital City Vitriified Brick and Paving Co. was established in this city in 1889, and was organized and incorporated by local business men and capital. Ever since its establishment it has been operated uninterruptedly from eight to nine months each year. The last ten years have been marked by greater prosperity than the first years, due to more efficient management and the steady growth of Topeka, affording a large market for its paving brick. The vitriified paving and sidewalk brick from this plant have a deservedly wide reputation. Although large quantities of the product of this plant are shipped over the state and adjoining state, the bulk of its product is consumed in Topeka.

T. A. Beck is president; N. S. Wear, vice president; Willis Edson, secretary and treasurer; C. C. Baker, D. A. Mulvane, Matt Weightman, Jr., and E. L. O'Neill constitute the officers and board of directors. J. W. Boltz is superintendent of the yards and has full charge of the burning and making of brick. A large share of the credit for the success of the business is due to Mr. Boltz as an expert and thoroughly competent brick maker and to Mr. Edson for the general management of the company's affairs. Its daily capacity is 45,000, this number being handled each day by several men. Altogether the business gives employment to about 75 men from eight to ten months in the year.

May Erect a New Plant.

GALVESTON, TEX., Sept. 15.—Mr. Charles Efron, president of the Atlantic Efronite Co., recently visited this city, investigating the possibilities for the location and erection of a plant here for the manufacture of white clay, mined from the deposits of his company located on the San Antonio and Aransas Pass railroad, between Muldoon and La Grange. "The above mines," said Mr. Efron, in speaking of the product, "are situated in Fayette County, and are inexhaustible, and the character of the product mined is recognized the world over as a peculiar metallic earth of a snow white appearance and employed in the manufacture of textiles, paper, cotton seed oil, paint, pottery and thirty various industries. After ten years of persistent and tedious experimenting and hard work by eminent chemists and specialists here and abroad the mineral called "Efronite" is reduced chemically to an impalpable powder, and adopted with great success in various important industries in the United States and Europe. "The company intends to mine 500 tons daily," said Mr. Efron last night, "erect a new industrial settlement at the mines proper and construct works and warehouses of the above product at Galveston on tide water with all facilities for the rapid loading and discharging of cargoes to be shipped for export."

Make High Grade Brick.

PORTSMOUTH, OHIO, September 13.—The Kentucky Fire Brick Co. are successors to the Louisville and Portsmouth Fire Brick Co., and are manufacturers of high grade fire brick, with offices in the Masonic Building. The officers of the company are: J. B. Hammond, president; Theo. M. Berkey, vice president; L. P. Haldeman, secretary and treasurer, and Henry K. Leighow, manager. The mines from which they procure their raw product are in Carter and Rowan Counties, Ky., and their plant is at Haldeman, Ky. They maintain a Southern office in Birmingham and also an office in Pittsburg.

J. & W. A. Elliott received the contract for the erection of a brick store building at Hennepin Avenue and Twenty-sixth Street, for C. A. Robinson. It will be 50x60 ft., two stories and basement, costing \$12,000.00. Lindstrom & Williams, architects, Minneapolis.

The Chicago Pneumatic Tool Co. announce the fact that they will receive from the printers September 15 their new compressor catalogue consisting of 118 printed pages, printed in two colors, in which several new types and sizes of compressors are shown including their new Hamilton Corliss machines. Those interested will receive a copy upon request.

Wanted and For Sale

One insertion, 25c a line; Two insertions, 50c a line; Three consecutive insertions with no change in the composition, 56c a line. Count eight words to a line; add two lines for a head.

WANTED—HELP.

A PRACTICAL Quarryman to take entire charge of crushed stone plant in southern New England. Only thoroughly competent man need apply. State experience and references. S. I. care Rock Products.

EXPERIENCED GRANITE CUTTERS can find permanent position the year round. Men with family preferred. Open shop. Address, THE MILWAUKEE MONUMENT CO., Milwaukee, Wisconsin.

FIRST CLASS SALESMAN to wholesale monumental work; none but experienced men need apply. State experience and salary. Address ALEX FRASER & CO., Mansfield, Ohio.

WANTED—POSITION.

BY FIRST CLASS combination cutter. Can cut, letter, set and estimate any class of monumental or building stone. Can take charge of shop. Address P. O. Box 226, Berea, Ky.

WANTED—MISCELLANEOUS.

PARTNER IN AN ESTABLISHED Wholesale and Retail Monumental Business. Well equipped plant, 150 ft. front. Will sell or lease plant. Will remain with purchaser if desired and fill any position. Address Q 4, care Rock Products.

FOR SALE.

ALL OR PART INTEREST in the best sand stone quarry in the West. Unequalled opportunity. Address U 2, care Rock Products.

GRAY MARBLE QUARRY—The best undeveloped gray quarry in Tennessee; close to railroad; quantity abundant; color unsurpassed. Any one meaning business address W. C. MORTIMER, Friendsville, Tenn.

QUARRY of finest monumental black granite in the United States. Complete equipment for manufacturing on tide water. Best shipping facilities. Address U 1, care Rock Products.

FOR SALE—MACHINERY.

AIR COMPRESSORS—Second hand, belt or steam. Will sell cheap. No reasonable offer refused. Address W. S. FAIRHURST, 26 Cortlandt St., New York City.

CENTRIFUGAL PUMP, 4 in., engine attached, but little used, Ohio delivery. Address R. J. HAMILTON, Eureka Springs, Ark.

ONE INGERSOLL-SERGEANT DRILL—No. B 32, with all fittings; in A 1 condition. STANDARD LIME CO., Kendrick, Fla.

ONE SECOND-HAND five foot gauge stone channeling machine. Also, sixteen second-hand two yard, two way dump cars three foot gauge. THE McDERMOTT STONE CO., McDermott, O.

ONE SCREW feed gang saw 10x8x6 ft. high.

1 screw gang saw 8x6x6 ft. high.
1 Jackson stone planer, will plane 12x4-3x3-4 high, all in good condition. Cost to put in over \$7,500.00. Will sell to quick buyer for \$3,500.00. Address G. W. GOSSER, 3950 Liberty Avenue, Pittsburgh, Pa.

TWO LOCOMOTIVE CRANES.—One twelve tons and one eight tons, made by Bay City, Mich., Industrial Works. Both in good working order and for immediate delivery. Address THE BRAINERD, SHALER & HALL QUARRY CO., Portland, Conn.

PULSOMETER PUMPS and extra parts, five and eight. Heavy 6 in. Syracuse centrifugal pump and fittings, boilers, engines. Address MASLIN'S 165 First St., Jersey City, N. J.

WANTED—MACHINERY.

TO BUY SECOND HAND pulverizer or mill that will reduce crushed lime so that 90 per cent will pass through a 50-mesh screen. Address U 3, care Rock Products.

MISCELLANEOUS.

FOR LEASE—Oolitic Limestone Quarry Property—Located on Northern Alabama railroad, unlimited oolitic sandstone and hard limestone, suitable for ballast, 80 acres in tract. Would sell property at reasonable price; fine opportunity for right man to make some money; solicit correspondence. ALABAMA TENNESSEE STONE CO., Russellville, Ala.

FOR SALE OR LEASE—A Granite Quarry, situated 20 miles from Baltimore, Md., and Washington, D. C. It is partially opened and equipped. 30 h. p., ledger main edge, derricks, tools, and equipment, including crusher at Guilford, Howard County, Md. Address RUFUS W. AP- PLEGARTH, 10 E. Lexington St., Baltimore, Maryland.

FOR SALE!

At Gouverneur, St. Lawrence Co., N. Y.

The new and up-to-date Marble Mill and Quarry of The Rylstone Co., bankrupts. Fully equipped with all necessary machines, tools, hoisting power, etc., for the economical production of Gouverneur Marble for monumental and building purposes.

Mill is heated by steam, has an ample water supply from deep well and contains machinery as follows:

- 2 100 h. p. boilers, horizontal type.
- 1 200 h. p. Fishkill Corliss Engine.
- 1 hot and 1 cold water Rumsey pump.
- 1 Stillwell-Pierce Co.'s heater.
- 8 single pitman, Lincoln Iron Works, style G. P. gang, having iron hurst frames.
- Foundation and timbering for 2 more gangs.
- 12 gang cars.
- 1 12-foot Lincoln Iron Works rubbing bed.
- 1 Columbian cut-off or jointing saw.
- 1 Lane polishing machine.
- 3 Johnson sand pumps and distributors.
- 3 galvanized iron water tanks.
- 2 Spidel hoists.
- 1 Lincoln Iron Works saw punch.
- 4 small cars.
- 1200 feet track for gang cars.
- 400 feet track for small cars.

Private offers are solicited, and correspondence relative to the property invited.

D. G. SCHOLTON, Trustee.

WINNSBORO BLUE GRANITE

Rough Stock furnished in sizes and quantities without limit. Shipments guaranteed in 10 days from receipt of order in all cases.
Our Cutting Plant is complete in every detail and all business in this line is carefully and promptly executed.
ESTIMATES CHEERFULLY FURNISHED.

The Fine Texture and High Contrast of Winnsboro Blue Granite cannot be surpassed by the product of any quarry catering to the monumental trade. Winnsboro Gray Granite for Buildings, Mausoleums, and Bottom Bases cannot be excelled, either in striking appearance or economy. It has been accepted by the U. S. Government for Public Buildings of the highest type. The size of blocks in either stock is only limited by transportation facilities.
Capacity of quarries and plant practically unlimited.

Winnsboro Granite Company,

RION, SOUTH CAROLINA

fell 'em you saw it in ROCK PRODUCTS.

Business Directory.

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American Air Compressor Works.
Chicago Pneumatic Tool Co.
Clayton Air Comp. Works.
Ingersoll-Rand Co., New York.
Kottan, H. O.
St. Louis Steam Eng. Co.
Sullivan Machinery Co.

ARMORED HOSE.

Sprague Elect. Co.
Mulconroy & Co.

BAGS.

Milwaukee Bag Co.

BALL MILLS.

J. R. Alsing Co.
The Allis-Chalmers Co.
Fowler and Mining Machinery Co.

BELTING.

Chicago Belting Co.
Main Belting Co.
Gandy Belting Co., The

BLOCK TACKLE.

Yale & Town Mfg. Co.

BOILERS.

Aurora Boiler Works.
Lombard Foundry and Mach. Co.

BOLTING SCREENS.

Jeffrey Mfg. Co.

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Atlas Portland Cement Co.
Alpha Portland Cement Co.
Buckeye Portland Cement Co.
Chickamauga Portland Cement Co.
Chicago Portland Cement Co.
German-American Portland Cement Co.
Goetz, Chas. W., Lime and Cement.
Hartranft, Wm. G.
Illinois Steel Co.
Kosmos Portland Cement Co.
Lawrence Cement Co.
Lehigh Portland Cement Co.
Marquette Cement Mfg. Co.
Meacham & Wright.
Newaygo Portland Cement Co.
Northampton Portland Cement Co.
Sandusky Portland Cement Co.
St. Louis Portland Cement Co.
Whitehall Portland Cement Co.
Warner, Chas., Co.

CEMENT HYDRAULIC.

Banner Cement Co.
Fowler & Pay.
Western Cement Co.

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Cement Machinery Co.
Concrete Stone and Sand Co.
Century Cement Machinery Co.
Devers Cement Works.
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Knutzen & Isdell.
Keystone Cement Block Machine Co.
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Palmer, Harmon B.
Palmer, Noyes F.
Perfection Block Mach. Co.
Pettijohn Co., The.
Simpon Cement Mold Co.
Standard Sand & Mach. Co., The.
Stringer Machine Co.
Stralt, John.
Winget Concrete Machine Co.
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Peerless Brick Mac. Co.

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Power and Mining Machy. Co.
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Bartlett, C. O. & Snow Co., The.
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Clyde Iron Works.
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Manufacturers' Agents

MONUMENTAL GRANITE

All Work Furnished Direct From the Quarries.

Estimates Cheerfully Furnished.

DIXON, ILL.

Every Retail Dealer ought to have in his Show Room a few Imported

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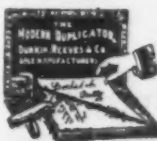
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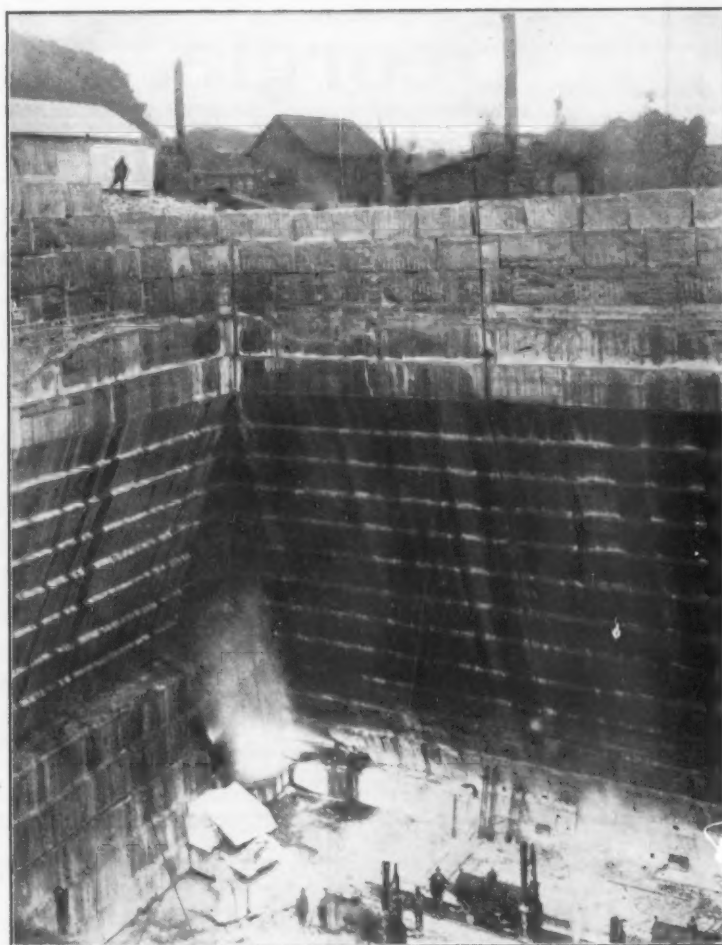
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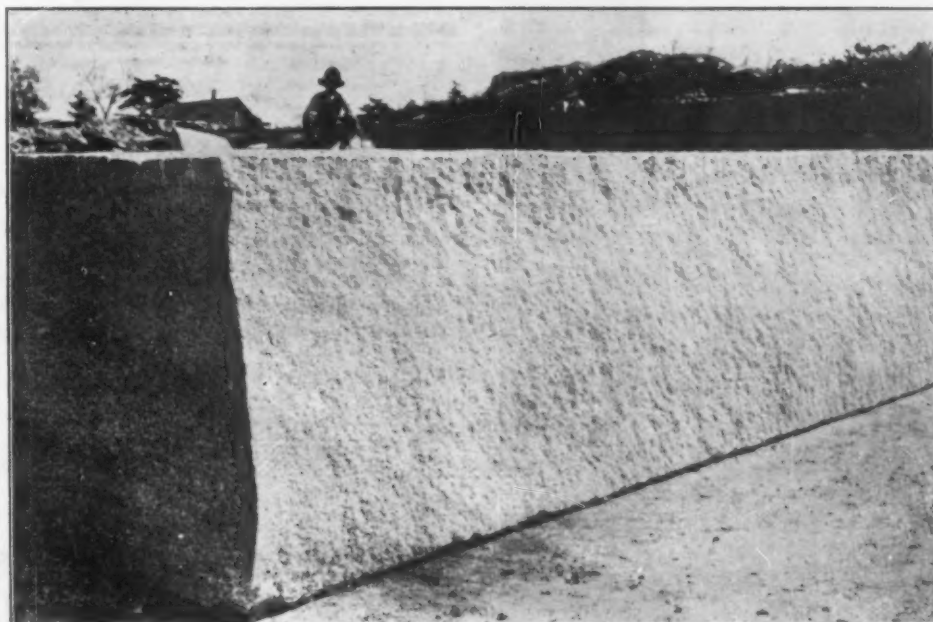
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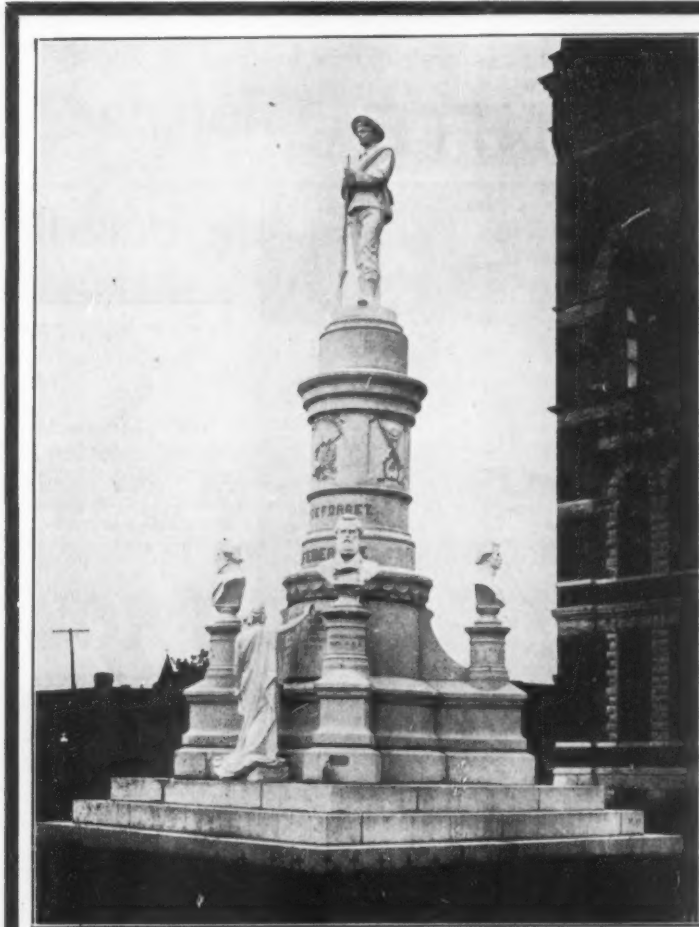
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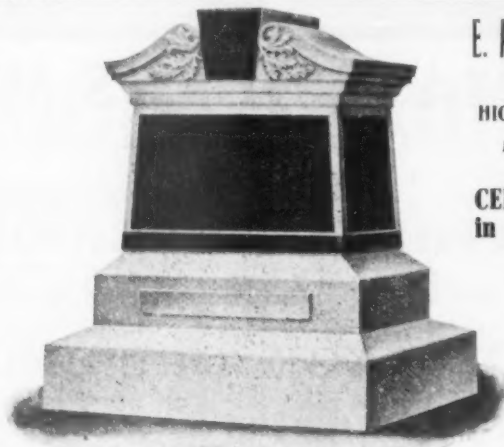
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I have bought all the exterior granite work on the Cook County Court House which has just been torn down, and have in my yard ready for shipment many tons of granite admirably adapted to many uses in building, decorative and monumental construction. It is the well-known Fox Island, Me., gray and red granite, and immense blocks, slabs, and columns of almost any desired size may be had. The columns are all polished, and the other pieces partly polished. A special feature of the lot that will interest monument men is a collection of

100 Polished Columns

That may be built up into shafts or used separately. They are nine feet high and about three feet in diameter, polished and ready for use. Stones suitable for bases, caps, dies and vertical courses for vaults in many sizes and shapes. An endless variety suitable for almost any situation in building work. A rough classification of some of the material includes the following: Polished Columns (9-0x3-0 and 12-3x1-6), Bases and Capitals for Columns, Base Courses, Polished Slabs, Pilasters, Dies, Lintels, Coping, Platforms, Blocks polished on three sides as large as 4-10x10-8x4-4, Polished Slabs 12-0x5-9x1-3. Correspondence and inspection invited.

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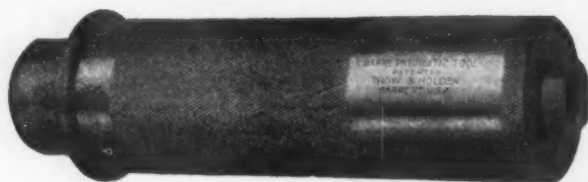
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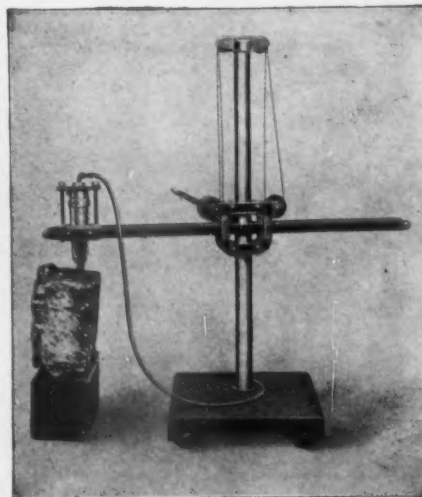
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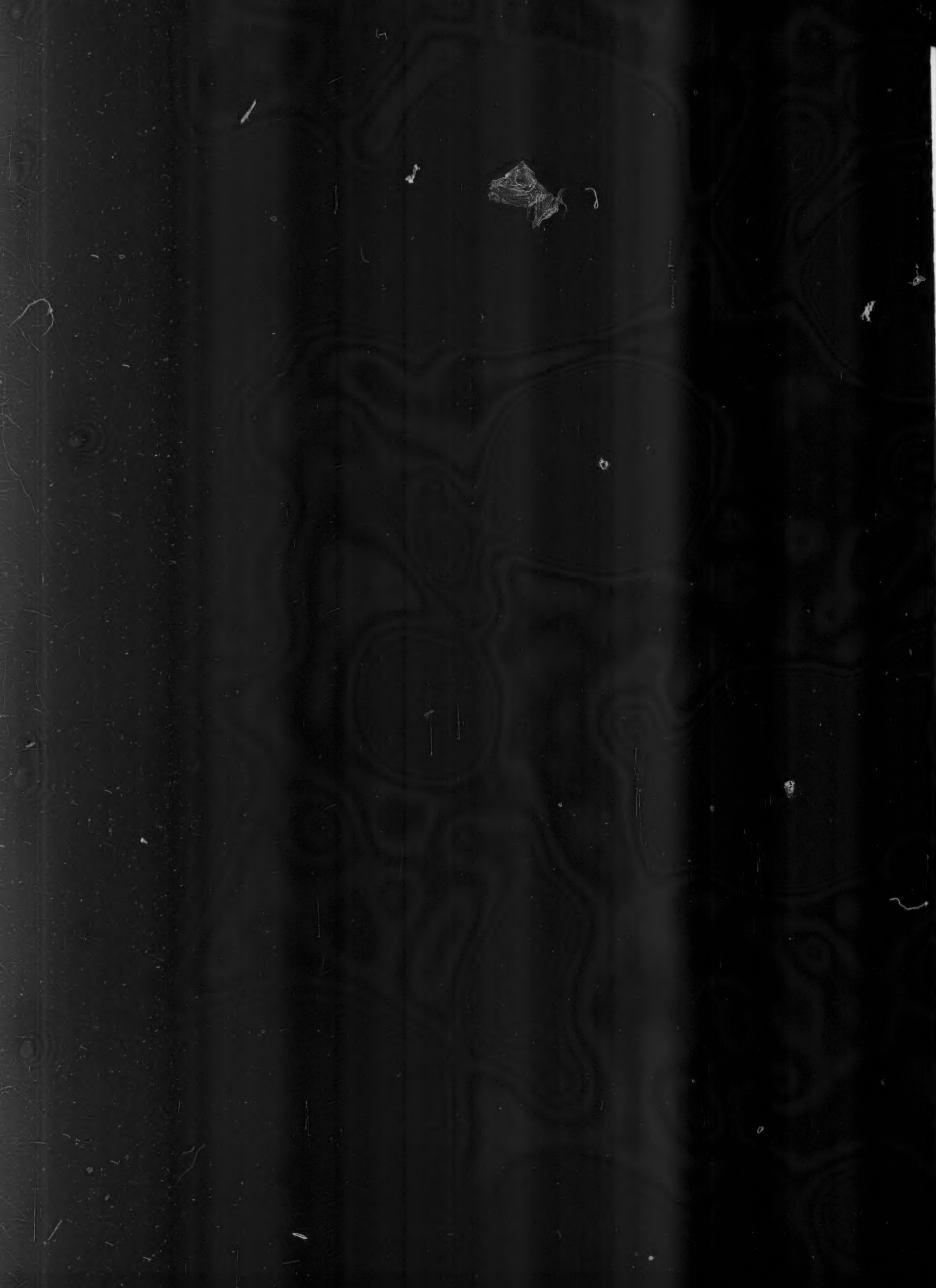
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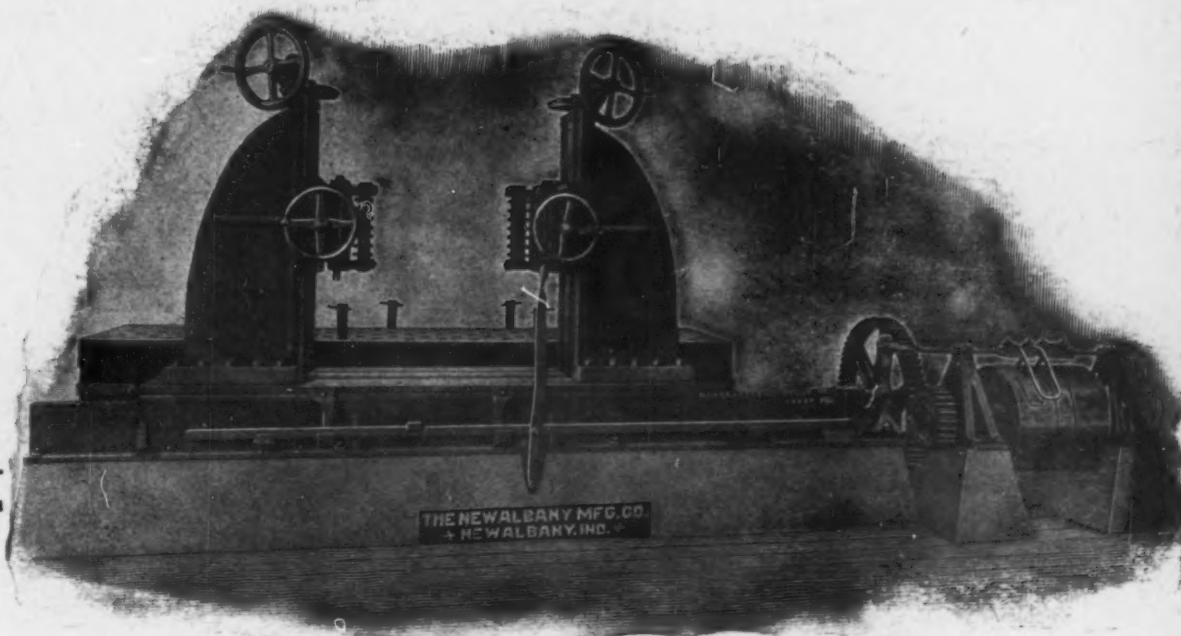
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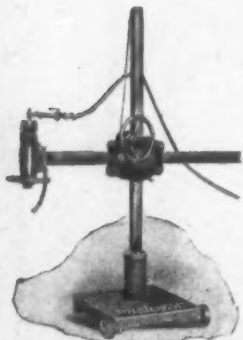
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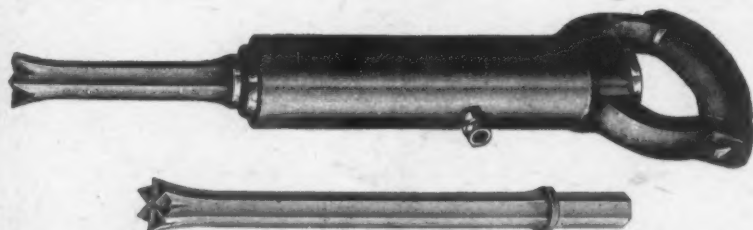


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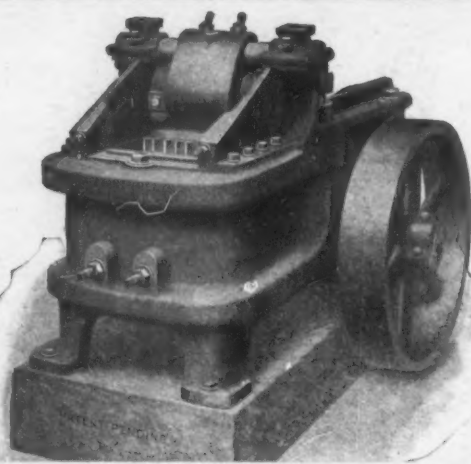


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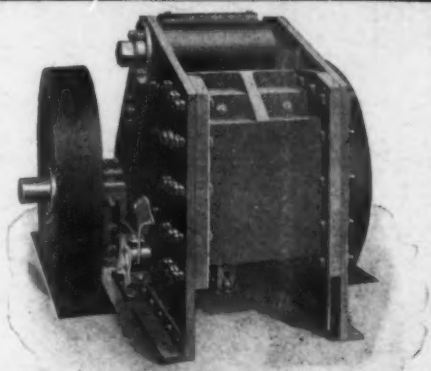


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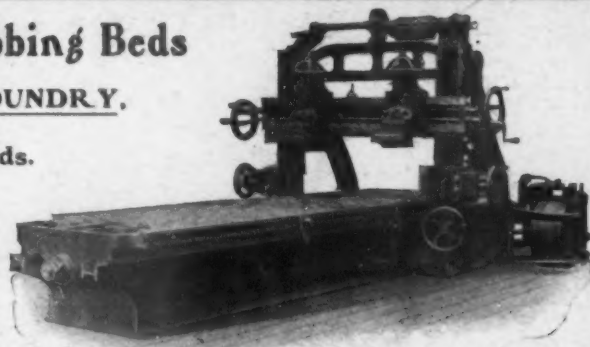
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